Ancient Commentators on Aristotle

GENERAL EDITOR: RICHARD SORABJI

SIMPLICIUS:
On Aristotle Categories 7–8

Translated by
Barrie Fleet

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BLOOMSBURY
LONDON • NEW DELHI • NEW YORK • SYDNEY

Bloomsbury Academic
An imprint of Bloomsbury Publishing Plc

50 Bedford Square
London
WC1B 3DP
UK

1385 Broadway
New York
NY 10018
USA

www.bloomsbury.com

First published in 2002 by Gerald Duckworth & Co. Ltd.
Paperback edition first published 2014

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British Library Cataloguing-in-Publication Data
A catalogue record for this book is available from the British Library.

ISBN HB: 978-0-7156-3038-9
PB: 978-1-4725-5734-6
ePDF: 978-1-4725-0101-1

Acknowledgements
The present translations have been made possible by generous and imaginative funding from the following sources: the National Endowment for the Humanities, Division of Research Programs, an independent federal agency of the USA; the Leverhulme Trust; the British Academy; the Jowett Copyright Trustees; the Royal Society (UK); Centro Internazionale A. Beltrame di Storia dello Spazio e del Tempo (Padua); Mario Mignucci; Liverpool University; the Leventis Foundation; the Arts and Humanities Research Board of the British Academy; the Esmée Fairbairn Charitable Trust; the Henry Brown Trust; Mr and Mrs N. Egon; the Netherlands Organisation for Scientific Research (NWO/GW). The editor wishes to thank Tom Bole, Michael Chase, Ian Crystal, Brad Inwood, Alexander Jones, Frans de Haas and John Thorp for their comments, George Karamanolis for valuable comments on the whole ms., and Myrna Gabbe and Han Baltussen for preparing the volume for press.

Typeset by Ray Davies
Printed and bound in Great Britain

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Abbreviations

DK = H. Diels, *Die Fragmente der Vorsokratiker*, 6th edition revised by W. Krantz, Berlin 1952
KRS = G.S. Kirk, J.E. Raven and M. Schofield (eds), *The Presocratic Philosophers*, 2nd edition, Cambridge 1983
LS = A.A. Long and D. Sedley (eds), *The Hellenistic Philosophers* (2 vols), Cambridge 1987
LSJ = H.G. Liddell, R. Scott and H.S. Jones, *A Greek-English Lexicon*, 9th edition, Oxford 1940

Works of Aristotle

An. Pr. = Analytica Priora (Prior Analytics)
DA = de Anima (On the Soul)
EE = Ethica Eudemia (Eudemian Ethics)
EN = Ethica Nicomachea (Nicomachean Ethics)
GC = de Generatione et Corruptione (On Coming-to-be and Passing Away)
Int. = de Interpretatione
Metaph. = Metaphysica (Metaphysics)
Phys. = Physica (Physics)
Sens. = de Sensu et Sensibilia (Sense and Sensibilia)
Top. = Topica (Topics)

Preface

Richard Sorabji

Aristotle's *Categories* was the battleground on which his future role in the curriculum of the West was decided. The earliest commentaries, from that of Andronicus in the first century BC, had focused above all on the *Categories*. And the work had not only been defended but also attacked – with particular ferocity by the Platonists Lucius and Nicostratus who wrote, not commentaries, but simply attacks on the *Categories*. So Plotinus in the third century AD had plenty of ammunition to draw from when he mounted an attack which could well have been decisive in *Enneads* 6.1. Plotinus' disciple and editor, Porphyry, rescued Aristotle and made him central to the western curriculum once and for all, with the *Categories* as the first work in the curriculum. In the seventeenth century Jesuits still chose the *Categories* as the first work to be translated into Chinese, as being the basis of all further thought.

In mounting their defences of Aristotle, Porphyry and Iamblichus would have been able to draw on many hints in Plotinus' aporetic discussion, as has been very well brought out by Steven Strange.[1] On the other hand, I cannot accept the view of Rainer Thiel that Plotinus was not attacking Aristotle after all.[2]

In his *Categories*, Aristotle recognises ten categories: substance, quantity, relative, quality, acting and being acted on, position or posture, when, where, and holding or wearing. It has plausibly been suggested by C.M. Gillespie[3] that Aristotle thought up his ten categories by taking as an example of a substance one of the students in his classroom and suggesting what further properties might belong to that substance. The student would have a certain size or quantity. He would be in relation to other students, to the right of one, to the left of another. He would have qualities like being fair. He would be acting, for example, writing and being acted on, for example, jostled by his neighbour. He would be in a sitting position. It would be in the afternoon. He would be in the Lyceum (the name of Aristotle's school) and he would be wearing certain types of clothes. Aristotle's examples of substances were things like people and horses. They were all physical bodies except for God and any other divine minds there might be.

The Neoplatonists did not take the *Categories* to have been thought up in this conversational sort of way. Rather, they took the ten categories as a definitive guide to the whole of Aristotle. This led them to ask highly philosophical questions, which might not occur to us, about how the system of categories was to work out in detail throughout Aristotle's system. It made their approach to the *Categories* perhaps more philosophical and less historical than ours.

It should be noticed that Aristotle does not argue that there are ten categories; he simply presents the ten. It is the same with his four causes. He does not argue that there are four modes of explanation. In each case he rather says 'see it like this'. That is how the best philosophy often occurs. By an act of imagination, a great philosopher presents a compelling picture. The argument comes in only later in the process of working out the details and defending the imaginative suggestion. We are wrong if we suppose that we will understand philosophy by looking only at the arguments for propositions. Rather, we must understand both the pictures presented and the argumentation.

From very early on, Aristotle's scheme of categories was disputed. Xenocrates, the third head of Plato's school, said that all we need is what exists in itself and what is relative. These two categories had been enough for Plato and they should be enough for us. We are told this by Simplicius *On the Categories* 63,22-3. For each category there was someone at some time who said that that category should instead be understood as relative. Plotinus was a major critic of the *Categories*. He deplored the fact that the *Categories* failed to describe the intelligible world of Platonic forms. Even as descriptions of the sensible world in which we live, Plotinus in 6.3 accepted only the first four categories (substance, quantity, relative, and quality) as acceptable, and even that only with qualifications. He then added a fifth category of his own, the category of change, not recognised by Aristotle, but drawn from the five Great Kinds postulated in Plato's *Sophist*. Plotinus presents change as a category in 6.1.15 (12-16). Aristotle himself did not say where change belonged in his scheme of categories, but Aristotelians put it under the category of quantity.

Plotinus had a completely different view of the nature of reality. He thought that the qualities we perceive in the sensible world were mere shadows and traces of the activities of intelligible Platonic forms in the intelligible world. He explains this in 2.6.3 (11-26). He regards Aristotle's substance as a mere conglomeration (*sumphorêsis*) of qualities and matter, 6.3.8 (19-23), while matter is only a shadow upon a shadow (30-7). He complains that Aristotle either excludes intelligible substances from his categories or, if he includes them, exceeds the number of ten categories handed down by Aristotle and combines prior entities with posterior entities within a single category in violation of what Aristotle allowed, 6.1.1. In 6.2, Plotinus thinks that the right description of the intelligible world of Platonic forms is provided by the five Great Kinds of Plato's

Sophist. He excludes Aristotle's quantity, quality and relative from being descriptions of this world (chapters 13, 14 and 16). He also thinks of Plato's Five Kinds, viz. Motion, Rest, Being, Sameness, and Difference, as creative forces in a way which is very hard for us to accept. But the other four kinds, in Plotinus' view, combine with Being to create the species and particulars. Moreover, this world of creative genera and species is not spread out but all united into an indivisible whole, rather as the rational principles in seeds are not spread out until the animal grows out of them.

Many of the most severe criticisms of Aristotle's scheme of categories turned on the notion of a relative. For Aristotle a relative is not a relationship but the thing related. A slave is a relative according to Aristotle's *Categories* 7a31-b1, but human is not, even though a slave is a human. Slave is relative to master. Aristotle gives two definitions of relative. According to the first definition (*Cat.* 6a36-7), something is spoken of as relative when whatever it is itself is said to be of or in relation to other things, as a slave is said to be a slave of a master. Aristotle adds a further restriction that there should be reciprocity between the relative and its correlate (6b28-7; 6a18), and a master is indeed said to be the master of a slave. But later in the same chapter of the *Categories*, ch. 7, Aristotle gives a second definition of relative (8a31-2). He says he wishes to exclude heads and hands from being relatives. In fact, he would seem to have ruled this out already by his requirement of reciprocity. For although a hand is said to be the hand of a person or animal, a person or animal is not said to be the person or animal of a hand. Nonetheless, Aristotle now offers us a stricter definition of relative. For a relative to be is the same as its being disposed relatively to something. The phrase 'disposed relatively to something' is in Greek *pros ti pôs ekhon*. The rival Stoic school used the same phrase for the fourth of their four categories and they understood the relatively disposed, so we learn from Simplicius (*in Cat.* ch. 7, 166,15-29), as involving what Peter Geach has called Cambridge Change. The distinctive feature of such change is that what is relatively disposed, for example what is to the right of something, can cease to be to the right without undergoing any change itself, just through the thing on the left moving. It has recently been shown by David Sedley that Plato's Academy had also used the expression 'relatively disposed' according to Simplicius (*in Cat.* ch. 8, 217,8-32). And the idea of Cambridge Change is already found in Plato's *Theaetetus* (154B-155D), where Plato says that Socrates can become shorter than Theaetetus without undergoing any change himself, by Theaetetus becoming taller. Aristotle adds a corollary (8a35-b15): if one knows definitely that something is relative then one also has definite knowledge of the thing to which it is relatively disposed. This is applied both to universals (8a24-8) and to particulars (8b7-13). If one knows definitely that this particular is more beautiful one must know the thing than which it is more beautiful and know it definitely, not merely as 'something less beautiful'.

Aristotle's belief that this stricter definition of relative as involving Cambridge Change will exclude hands from being relatives is puzzling in more than one way. It is puzzling not only because hands should already have been ruled out by the reciprocity requirement, but also because it is not clear that hands would be ruled out by the new requirement concerning definite knowledge. Aristotle says in many works that a hand is not a hand in the proper sense unless it is playing its part in a living organism. On this view, it would not be possible to have definite knowledge that something was a hand without knowing that it was the hand of a living organism. Had Aristotle not yet thought of this functional view at the time he wrote the *Categories*?

Aristotle, as well as Plato, was well aware of the idea of Cambridge Change. He sees that change in respect of relatives is merely a Cambridge Change in the sense that a thing can start or stop being relatively disposed without undergoing any change itself, and he concludes that relative change is not genuine change. This view is found in the *Physics* 225b11-13 and the *Metaphysics* 1088a30-5. The Stoic school agreed that relative change was not genuine change but some people disagreed, so Simplicius tells us (*in Cat.* ch. 7, 166,17-29; 172,1-5). Simplicius himself disagreed, and much earlier, Aristotle's own successor Theophrastus also accepted relative change as genuine.

Plotinus discusses in 6.1.7 (1-21) the question whether a relative like larger exists just in our minds and is not real. Is it that all that really exists is a quantity such as three foot long and then a comparison made in our minds with something that is only two foot long? Plotinus replies that, on the contrary, relatives are real whether we in our minds recognise the greater size of the three foot item or not. But, he adds, the impression that relatives are not fully real can be created by the fact that some of them involve merely Cambridge Change.

Plotinus raises the question whether some item should be transferred to the category of relative on a number of different occasions. Simplicius often records replies and occasionally Plotinus himself makes a reply. The two commonest replies are that the item in question does not meet Aristotle's requirement of reciprocity in the relative relationship or alternatively that the item does not meet the second stricter definition of relative, the definition which involves Cambridge Change. To take some examples, Plotinus in 6.3.11 (6-10) suggests that time and place, which Aristotle treated as examples of quantity, should rather be treated as relatives because time is defined as measuring motion and place as surrounding body. So they are relative to motion and body respectively. Plotinus thinks that Aristotle's category of quality is something of a ragbag and that the boxer's ability to produce effects in something or someone else makes the boxer a relative so that boxing belongs with relatives rather than with qualities in this regard, 6.1.12 (19-31). Plotinus further raises the question whether his category of change should be reassigned to the

category of relatives because change according to Aristotle belongs to a subject in a potential state and the potential is relative to the actual, 6.1.17. He replies, however, that change does not meet the strict requirements of Aristotle's second definition of relative. Further, Plotinus takes an example of position or posture, namely, lying on (*anaklisis*) 6.1.24 (10-12), and treats this as a relative. Simplicius also asks if posture and having or wearing are not relatives but rules this out on both of the standard grounds (*in Cat.* ch. 9, 301,15-18; 339,24-35).

Finally, Plotinus has a discussion of the categories of when and where. These are not the same as time and place but are at a time and in a place. Time and place themselves are treated by Aristotle as quantities, (*Cat.* ch. 6, 4b22-5). It has already been mentioned that Plotinus reassigns time and place to the category of relatives in 6.3.11 (6-10). He further treats when and where as merely being parts of time and place and therefore as belonging in the same category as them, 6.1.13 (1-3); 6.1.14 (7-13), and he explicitly says that where is a relative. Simplicius makes one of the two standards replies that being in a place does not display the right kind of reciprocity for being a relative (*in Cat.* ch. 9, 360,7-21). Plotinus continues his critique in 6.1.14 (19-24) by saying: if at a time and in a place are separate categories, why not postulate separate categories for in a vessel, in matter, in a subject, for a part in the whole and the whole in parts, for the genus in the species, and the species in the genus? Simplicius replies (*in Cat.* ch. 9, 349,19-35) that in a vessel is indeed recognised by Aristotle as a special kind of being in a place. With the other examples, however, the two items which are said to be one in the other are not sufficiently independent of each other to be one in the other in a straightforward sense.

The criticisms so far have concerned individual categories but other criticisms concerned Aristotle's whole scheme. For example, Aristotle insisted that categories other than substance are inseparable from substance (*Cat.* 1a20-b9; 2a11-b6). Colour is inseparable from body and Socrates' colour, so the ancient commentators understood him, is inseparable from Socrates. The last claim made the commentators ask why is Socrates' fragrance inseparable from him? Can it not float off into the surrounding air? One answer is given by the Neoplatonist commentator Ammonius. The fragrance does not float free from Socrates because it is still attached to little particles which have floated off from Socrates so is not separated from its original subject. Philoponus, one of Ammonius' pupils, wrote a commentary not only on Aristotle's *Categories* but also on his treatise *On the Soul*. And he realised that this solution would create problems for Aristotle's theory of sense perception. According to this, there are three long-distance senses, sight, hearing and smell, and with these senses the medium intervening between observer and observed plays a crucial role in our perception. It would prevent sight, hearing, and smell from being long-distance senses if they operated by direct contact with particles from the perceived Socrates. Such a theory of direct contact was

rejected as being one of the cruder suggestions of the Presocratic philosophers. Philoponus rescues Aristotle's *On the Soul* by saying (*in DA* 392,3-31) that although fragrant particles may stream off Socrates and come some of the way towards the perceiver, they do not reach all the way. Evidence that they do not is provided by crocodiles and vultures. Crocodiles can smell cooked meat suspended above the water even though the vapour particles from the meat go upwards from the water. Vultures can smell carrion from many miles away, faster than particles would take to travel that distance. This answer rescues Aristotle's treatise *On the Soul*, but leaves us dependent on some other solution for the alleged inseparability of Socrates' fragrance from Socrates. One answer is that it is not the fragrance itself, but the activity (*energeia*) of the fragrance, that reaches us.

Another question raised by the commentators was how differentiae fit into Aristotle's scheme of categories. The differentia of the human species is rationality, because it is what differentiates humans from other species in the genus animal. Frans de Haas in his book, *John Philoponus' New Definition of Prime Matter*, Leiden 1997, has rightly said that the question is misconceived, because 'differentia' is not the name of a category but the name of a role. A differentia plays a role in defining the species human, the role of differentiating one species from another. It therefore does not belong in the scheme of categories at all. However, the ancient commentators did not see this solution. They noticed that Aristotle speaks in passing in the *Categories* at 3a21-8 as if differentiae were distinct from substance. But surely, they thought, differentiae cannot be mere qualities like Socrates' colour or fragrance because that is not essential to Socrates in the way that differentiae are essential to the human species. The commentator Porphyry, therefore, makes the new suggestion (*in Cat.* ch. 5, 95, 17-20) that the differentia is neither a substance nor an ordinary quality but an essential quality or substantial quality. The later Neoplatonist commentator Ammonius complains, however, that substantial quality would represent an eleventh category. Plotinus canvasses the opposite suggestion that the differentia is a mere quality (2.6.1-2). But he goes on to give the answer in 2.6.3 that the difficulty of placing the differentia merely illustrates how confused Aristotle's whole category of quality is.

A further general question about the *Categories* is how Aristotle's concepts of matter and form fit into the scheme. Matter and form are never mentioned in the *Categories*. The commentators asked, is form substance? That is often taken to be the conclusion of Aristotle's more detailed work, *Metaphysics* Book 7. But another view was that form, on the contrary, so far from being substance, is merely an accidental property of prime matter. According to Simplicius, Porphyry had said that rationality, even when it serves as the differentia of the species human, can be said to inhere as an accidental property in prime matter (*in Cat.* ch. 2, 48,11-34). Moreover, Porphyry (*in Cat.* 78,6-7) assimilates the inherence of fragrance in Socra-

tes to the sense in which form is in prime matter. The sixth-century commentator David, printed in the standard edition of the commentators (*CAG*) as Elias (*in Cat.* 151,25-34) allows that form is an accidental property of matter.

Finally, where does matter fit into the scheme of categories? The authors of commentaries on Aristotle's *Metaphysics*, Asclepius and Pseudo-Alexander, say that matter does not fit into the categories at all. But Philoponus has a very interesting and original view, according to which prime matter turns out to be in the category of substance. Prime matter is the most fundamental subject of properties. It is not like wood, a subject which can take on various shapes, sizes and relations but which has essential properties of its own. Prime matter is the most basic subject of all properties and, therefore, needs to be conceived as having no properties of its own. According to Philoponus' *Contra Proclum* Book 11, what Aristotle should have said is that this ultimate subject of properties is three-dimensionality. Three-dimensionality can be regarded as prime matter, as quality-less body and (by analogy with Porphyry's substantial quality) as substantial quantity. In calling it quality-less body, Philoponus is saying that three-dimensionality is body with its properties ignored. Bodies like humans and horses provide Aristotle's most typical examples of substances, and by making prime matter into quality-less body, Philoponus is thereby treating it as being a substance and, indeed, the most fundamental and basic aspect of substance.

This has illustrated some of the main criticisms of Aristotle's scheme of categories and I should now describe the fight-back. Porphyry, who was Plotinus' loyal disciple and editor, nonetheless disagreed with Plotinus' attack on Aristotle's *Categories* and put Aristotle and his *Categories* back on the map forever. According to Porphyry, Aristotle's *Categories* is about the words which are applied primarily to the things in the sensible world. The commentator Dexippus adds that the *Categories* is for beginners. In between Porphyry and Dexippus, Iamblichus had offered, according to Dexippus, his intellective interpretation of the *Categories*. Aristotle's description of the categories does after all apply to the intelligible world of Platonic Forms but the Platonic intelligibles are not fully describable, because any description analyses them into distinct aspects whereas the intelligibles are really unitary. Nonetheless, when properly understood, Aristotle's description of the sensible categories does apply by analogy to the world of Platonic intelligibles. Take the example of the category where. Aristotle defines place, and so by implication where, in terms of one's surroundings. One's place is one's surroundings, or more particularly, the inner surface of one's surroundings, and so one's place is thought of by Aristotle as embracing one. Simplicius suggests (*in Cat.* ch. 9, 363,3.16.29; 364,22) that 'embracing' needs to be taken in the right sense. The relevant embracing is a kind of hugging which gives shape and form to what is embraced. If where and place are understood as embracing in this sense,

then Aristotle's description of the category of where applies both to the sensible world and to the intelligible world. Place is here treated not as something inert as in Newtonian mechanics but as something dynamic, which it has become in Relativity Theory.

I shall finish with a positive contribution made by Aristotle's *Categories* and the commentaries on them to mediaeval thought. There the idea of latitude of forms played a major role. The idea of latitude is the idea of a range admitting of various degrees. This has often been thought to be a largely mediaeval contribution to philosophy with antecedents perhaps among the ancient medical doctors, especially Galen. But actually the idea without the word goes back at least to Plato's *Phaedo*. Plato says there at 93A-94A that the soul cannot be treated like harmony in the strings of a lyre, because harmony admits of degrees. The strings can be tightened or loosened, whereas there are no degrees of being a soul. Aristotle in chapter 8 of the *Categories* (10b26-11a5) allows that one person is called more grammatical than another or juster or healthier. But he reports a view that justice does not admit of degrees. One justice is not more justice than another. Rather there are degrees of possessing justice. This is reported as one of four views on the matter by Porphyry (*in Cat.* 137,25; 138,32) and Simplicius (*in Cat.* ch. 8, 283, 29-291,18). And Simplicius reports the controversy as involving the idea of *platos*, the Greek word for latitude or range. Simplicius further reports that the belief that it is only possession which admits latitude or range was rejected by Plotinus (Simplicius, *in Cat.* ch. 8, 284,12-17) and by Iamblichus (*in Cat.* 288,18-30).

Notes

1. Steven Strange, 'Plotinus, Porphry and the Neoplatonic interpretation of the Categories' in W. Haase and H. Temporini, eds, *Aufstieg und Niedergang der römischen Welt* 2.36.2, 1987.

2. Rainer Thiel, in his part of the introduction, pp. viii-xiv of Charles Lohr's edition (1999) of Guillelmus Dorotheus' Latin translation of Simplicius *in Cat.*, Venice 1540.

3. C.M. Gillespie, 'The Aristotelian Categories', *Classical Quarterly* 19, 1925, 75-84.

Introduction

Simplicius' approach to Aristotle's *Categories* is shaped by two main factors. First, by the time that Simplicius was writing, the *Categories* was already firmly established (along with the other works of Aristotle that comprise the *Organon*) as the starting point of the philosophical curriculum. On several occasions in his commentary on chapters 7 and 8, Simplicius acknowledges the introductory nature of the *Categories*. There was already an impressive number of critical works and commentaries on the *Categories*, and, as Professor Sorabji has pointed out above, Porphyry's commentaries had established their credibility beyond doubt so that Simplicius was part of a continuing tradition. Secondly, Simplicius as a Platonist was concerned to reconcile as far as possible the views of Aristotle with those of Plato. In this respect, along with the other commentators, Simplicius attributes a role to the *Categories* that certainly runs counter to Aristotle's intentions in writing an introductory work; as a consequence Simplicius finds many difficulties in plotting the *Categories* against the general framework of Platonic and Aristotelian teachings.

A notable example of this is his discussion at the start of his commentary on each of the two chapters in this volume (and at the start of his commentary on chapter 6) on the order of the presentation of the categories by Aristotle – particularly Quantity, Relative and Quality. Aristotle himself is apparently not consistent, and although Substance, Quantity, Relative and Quality appear in all his lists, the number and order varies. This was presumably unproblematic for Aristotle, but the commentators are very concerned, in particular about the order. There is no doubt that, given the fact that the *Categories* is concerned with the Sensible World (although several of the commentators, notably Plotinus, have much to say on this score), Substance should stand at the head of the list. But for a Platonist there could be no doubt that in the larger scheme of things Quality should stand second in that it is of all the categories after Substance, the one that is most akin to the Forms in the Intelligible World. Plato never falls into the trap of stating precisely what there are Forms of, but it is clear that many of the highest ranking Forms are, in Aristotelian terms, qualitative rather than substantial; for example, the highest form in the *Republic* is the Good, and the Same and the Different appear among the five 'greatest kinds' in the *Sophist*. On the other hand, Quantity to a

Platonist has more to do with matter in the Sensible World, and should therefore stand lower in the order 'according to nature'. But in the *Categories* there is no mention of Form and Matter, either because Aristotle had not yet formulated his doctrine on this subject, or, more likely, because it was inappropriate to assume a knowledge of this doctrine on the part of students at the outset of their philosophical training. So, albeit uncomfortably, Simplicius accepts Aristotle's order 'according to teaching', in that at the end of the chapter on Substance quantitative considerations are introduced, which naturally lead on to a discussion of Quantity; similarly Relatives, although described by Aristotle as 'offshoots', claim pride of place over Quality in that once two factors, viz. Substance and Quantity, have been introduced, relationship occurs.

Simplicius' procedure is to take a passage of Aristotle's text and to begin by discussing broader issues such as the one above, reviewing the findings of his predecessors, and often adding his own evaluation, typically prefacing it with 'perhaps'. In the case of Relatives, one question which he deals with at some length (169,1ff.) is whether Relationship (*skhesis*) has substantial existence (*hupostasis*) in its own right, or whether it is merely a parasitic appendage (*paraphruas*) or, as Plotinus suggests, a mere concept in our minds (173,1ff.); Simplicius' conclusion is that Relationship underpins all the other categories, both Intelligible and Sensible, and should be kept separate. Another question which he deals with is the difficulty or even impossibility of defining a *summum genus* (159,9ff.), which leads to a further discussion of the division: is it into species, or is it just a list? (161,12ff.). He also discusses why Relatives are unique among the categories, in that they are always presented in the plural: you cannot have a relative on its own (159,23ff.). 'Cambridge Change' is considered at 171,23ff.

After this general review, Simplicius follows his usual practice of a more detailed analysis of the text, first looking at the features held in common with other categories such as contrariety (175,20ff.) and reception of 'the more and less' (176,19), and then considering candidates for the title of special features, such as correlation (179,27ff.) and simultaneity (189,19). Throughout the discussion, these features are held up against both of Aristotle's definitions of the Relative. He concludes with an overview of the problems and their solutions at 201,17ff. As a coda he raises the question of whether the genus of Relatives, being the genus *of* its species, is itself a Relative, and so one of its own species.

In his commentary on Quality (after remarks about the order) he proceeds to question the title: why did Aristotle (if indeed he did) give a double title (*Quality and the Qualified*) to this category alone (207,27ff.)? He then raises questions about the etymology of the word 'Quality' (208,23ff.), the corporeal or incorporeal nature of Quality (209,1ff.), whether it is self-causing (209,5ff.) and which qualities can be considered substantial (209,8). In the remainder of the general review he raises several fundamental issues; in particular, he is concerned to examine the

causal relationship between Forms (Platonic and Aristotelian) and qualities, and how forms can become instantiated in particulars as qualities. To do this he employs the complex Neoplatonic doctrine of *logoi* (218,31ff.), a term which I have left untranslated (but see n. 234). He next points out that in the case of Quality the division is into significations, not species. He then turns his attention to an analysis of the text, working through the four significations: state and condition (228,4ff.), capacity and incapacity (242,1ff.), affective qualities and affections (252,23ff.), and finally shape and figure (262,1ff.).

He reviews the opinions of others throughout, especially the Stoics, and often turns to 'the more intellective' doctrines of Iamblichus for support. Questions of particular interest which he discusses are: what are the differences between connate and acquired qualities (228,4ff.)? If we divide other categories by qualitative differentiae, how are we to divide Quality itself (275,27ff.)? Are affective qualities and affections different? Is condition a species of state? He then considers the common features – contrariety (which he concludes is not common to *all* of Quality), 'the more and less', and the particular feature of Quality which is common to all four significations of Quality but to no other category (i.e. 'like and unlike' (290,26ff.)). He ends his commentary on Quality with a lengthy digression on 'latitude' (*platos*).

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Textual Emendations

160,13 Reading *khrôntai* for *khrêtai*
162,20 Reading *heterôn* for *heterôi*
164,4 Adding *mallon* after *rhêtheie*
169,34 Reading *peri* for *pros*
169,34 Reading *tôi autôi* for *tou autou*
173,33 Reading *hoplôn* for *hoplitôn*
180,29 Adding *ê ou kata pantos* after *kat'oudenos*
182,21 Reading *koinônein* for *koinên*
182,24 Reading *autos* for *autois*
182,26 Adding *esti to de* after *autôn* (line 25)
192,20 Reading *helikoeidous* for *Lukomêdous*
196,22 Adding *tou* after *ennoian*, and reading *autêi* for *tautêi*
206,19 Reading *orthôs ho Arkhutas to poion prostattei. ho de deina to poson kai to pros ti protera einai* for *pôs ho Arkhutas*
209,16 Reading *stasin* for *probolên* (Kalbfleisch/Brandis; *parabolên* MS A)
211,2 Reading *tou* for *pou*
212,1 Reading *to* before *auto* with Kalbfleisch
214,11 Reading *homoiôs* for the MSS *homôs*
216,20-1 Removing *men* (l. 20) and *te* (l. 21), and changing *homoiôs* to *homônumôs* (l. 20)
217,29 Reading *hupothesin* for *hupostasin*
218,33 Omitting the second *aph'* (= *apo*)
220,14-15 Adding *idion hos* between *to* and *sunônumôs*
233,5 Adding *hos* after *houtos*
236,29 Reading *eipen* for *eiper*
238,28 Reading *daktulos* for *daktulios*
240,17 Reading *eien an* for *eipen hoti*
243,13 Adding *hê poiotês kaleitai* after *kai*
246,6 Adding *kata* before *ta*
247,31 Reading *edoxan* for *eidous êsan*
254,16 Reading *pathê* before *pathêtikas* with Kalbfleisch
265,21 Reading *tois epi tôn sômatôn skhêmasi* for *tois epi tôn skhêmatôn sômasi*

269,20 Reading *kai puknotêta* after *manotêta* with Kalbfleisch
274,8 Adding *de ousiôn tôn sômatikôn* after *sunthetôn*
278,12 Adding *-oun on tini esti* after *hoti*
279,35 Adding *en tôi posôi enantiôsis* after *kai gar*
280,3 Adding *hupostasin ekhei, hôste en têi* after *alla*
281,30 Adding *ouk* after *ardên*
283,11 Reading *ti koinon* for *to koinon*
287,32 Removing *te* after *ho*
288,27 Reading *tas teleias* for *tous teleious*
293,28 Reading *tou* for *tês*

Simplicius
On Aristotle
Categories 7-8

Translation

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Simplicius' Commentary on Aristotle's *Categories*

CHAPTER 7

Concerning what is relative to something 155,30

6a36-b14 Such things are called relatives [as are said to be just what they are [as being] *of* or *than* other things, or which are in any other way at all relative to something else. For example the larger is called just what it is [as being larger] than something else; for it is said to be larger than something; and double is said to be what it is of something else, since it is said to be the double of something – and so on. Such things as state, condition, perception, knowledge and position belong among relatives; for all these are said to be just what they are, and not something else, of other things. For state is said to be the state of something, and knowledge the knowledge of something and position the position of something, and so on. Therefore all things that are what they are *of* or *than* other things are relative to something. For example one mountain is said to be large relative to another, since it is relative to something that the mountain is said to be large; the similar is said to be similar to something, and other such things are likewise spoken of in relation to something. Lying down, standing and sitting are particular positions, and position belongs among things that are relative to something; but to lie down, to stand and to sit are not themselves positions,] but are so-called paronymously from the positions mentioned earlier.

Some people,[1] trying to avoid the problems which are raised against the given order of the categories, say that his teaching of them is lacking in order and occurs according to a random listing; they do not 156,1
realise that in saying this they are falling into worse problems. For those who speak in this way destroy the linking of things together[2] and also the self-consistency of the account. So we must suppose that his teaching of them was conducted in an entirely orderly manner. But the order is in any case twofold, the one according to nature and 5
to the essence (*ousia*) of each of the categories, the other with a view

to teaching and our own ease of learning. So it was necessary to produce a single standard of presentation, and not at one moment employ the order according to nature and at another that according to teaching. Since the order according to nature is more authoritative we quite reasonably put Substance at the head, since it is the first of all the genera, because it is seen in terms of Being itself and is the cause of Being for the others. So the order of the remaining categories ought to be presented according to the nature of their Being and their affinity with Substance, so that those closer to Substance are listed earlier, and those further away later. So if what exist *per se* have been put in order before what are relative,[3] and what pre-exist with the status of a subject before what supervene as accidents,[4] it is clear that Quality is prior to Relatives. And it has greater affinity with Substance, as the followers of Lucius also object, for [they say that] it is more apt to reveal Socrates from his snub nose, protruding eyes and pot belly – which are qualities – than from his being on the right hand, his being a friend and his other features which are relative. Besides, they say, if things that are spoken of are divided into two, – into what is *per se* and what is relative to something else – when [Aristotle] started to talk about what is *per se*, which includes Substance and Quantity, he ought to have added Quality and in this way to have proceeded to Relatives. If according to Aristotle himself that which is relative is like an offshoot and supervenes on what is conceived of as *per se*,[5] as something posterior, how could [Relatives] fail to be after Quality?

Archytas too says:[6] 'first must be Substance and the things that co-exist with it; in this way it must be relatively disposed towards something else; and after it the relationship (*skhesis*)[7] of what is acquired.' He puts Substance first, which includes all beings and apart from which nothing can exist, and next he puts the things which co-exist with it, viz. Quality and Quantity. But once there is a plurality of items, it is necessary for relationship to come in too, through which these plural items do, or do not, have affinities, and in this way the relationship of Relatives is simultaneously realised.

157,1 After this come all the other categories, viewed not in terms of connate relationship, but as the relationship which is acquired and variously composed. Aristotle himself too bears witness to the order; for when at the outset[8] he was listing the categories, he put Quality before the Relative. But if anyone were to give as the reason for such an order[9] the fact that the Relative does not, by falling between them, cut Quality off from Activity and Passivity, which are connate with it (for it is by quality that the agent acts and the patient is acted on),[10] he too should realise that neither potentiality nor actuality nor action nor movement would be able to act on something else or be acted upon by something else if the relationship of the relatively disposed were

not the starting point, linking the agent with the patient through kinship, so that the former can act and the latter be acted on. Therefore the relationship of the Relative had to be given priority for another reason too, as something common and connate and considered together with Being. For it has its Being by being relatively disposed, and for this reason is prior to the acquired relationships. Such a defence, however, is even at variance with what Aristotle thinks; for he does not conceive of the relationship of actuality in moving and being moved as being relative to the potentiality, with the result that relatives have of necessity been put immediately next in order before agents and patients; consequently it was not for this reason that he had to move the category of Quality to a later position.

But we should not accept the arguments of Andronicus[11] who put relatives after all the other categories on the grounds that it is a relationship and like an offshoot. For the connate relationship of relatives is prior to acquired relationships, as Archytas too thinks. Let this then be our observations on the various doctrines about the order.

It is worth asking again why, while Archytas puts Quality even before Quantity, Aristotle puts not only Quantity, but also the Relative, before Quality. The answer is that Archytas, as stated earlier,[12] out of affection for the intelligible forms put Quality, in terms of which the particular character of the forms is defined, straight after Substance, and then added straight after that Quantity, on the grounds that it too has affinity with Substance and is one of the things that exist *per se*, but after Substance and Quality. Next he put the Relative after Quantity, putting the common and connate relationship before what is particular and acquired.[13] But Aristotle valued generated and bodily substance more highly in the present exposition, and put Quantity, as being of a more bodily form, before Quality. Next to finish it was in consequence of this that he introduced the Relative after Quantity in all versions of the order.

According to one account, the one from nature, [this is so] since one aspect of Quantity is *per se*, and another is relative.[14] But the account concerning the Relative was made to follow immediately after that about Quantity (a) because excess and deficiency come into existence together with Quantity, and as a result proportions (*logoi*) between what exceeds and what is exceeded come into consideration, in all of which relationships exist; and (b) because magnitude and plurality pre-exist,[15] while the greater, the shorter, the more and the less supervene; so relatives were quite reasonably put after Quantity; and (c) because when plurality comes in to join substance in terms of quantity, a relationship too immediately comes to light with it according to which their common and their different features in relation to each other are considered. So in this way the Relative follows Quan-

tity according to nature. Such an order, moreover, is also appropriate for teaching. For because, in the discussion about Quantity, the great, the small, the much, the few – which seemed to be quantities – were shown to belong more among relatives,[16] it was necessary to add quickly an explanation of what relatives are.[17] That is why he presented them for consideration as examples of the Relative, although they were formerly under dispute, confirming the former (i.e. quantities) by means of the latter (i.e. relatives), and showing that the latter followed on from the former. For he says:[18] 'the larger is called just what it is [as being larger] than something else; for it is said to be larger than something.' He also says that a mountain is said to be large in relation to another mountain. Consequently if these things that were disputed immediately before have been shown by means of the general description of relatives to be among relatives, he would appear to have established this order on purpose, in order that they might immediately confirm each other. It is, however, clearly necessary to aim for ease of learning as well, particularly when this concurs with the order according to nature. One might reasonably say that even if relatives are secondary by nature, even so the account of them needs previous exposition in order that we should be able to distinguish immediately the relationships from their subjects and not refer them to the same category as their subjects, as in the case of the great and the small; for these seemed to be quantities, although they were among relatives, on account of the fact that the things in which the relationship [resides] are quantities.

But Porphyry wants to defend Aristotle's order.[19] He says that Quality has its origin in a combination of Quantity and the Relative – just as others thought, especially Empedocles,[20] who showed that qualities originate from the harmonious mixture of the elements. Plato too[21] constituted form of such-and-such a kind, which was determined in accordance with quality of such-and-such a kind, both of the body and of the soul by means of the ratios 3:2, 2:1, 4:3, 9:8 and other such ratios which are observed in the case of the quantified and in accordance with the Relative. The accessibility and ingenuity of his argument are praiseworthy, but it must be said that although among the results and compounds it is in no way unlikely that these things were engendered in this way, among their causal accounts all these things are contained in the proper order in terms of unity and a single principle. For one should not, in a causal account, put plurality above unity, and relationship above what is unrelated, and symmetry in composition above what is single in form and incomposite, nor should one transfer onto relatives that which is said in mythological terms and by way of indication of realities, in the way that it is said.[22] Enough said about the order of the Relative.

Going on to the text, we say that it was not possible to give a

definition of relatives. For it was not feasible to give definitions of the primary genera for the reasons stated earlier.[23] But it was possible, by means of a general description, to actuate our conception[24] that fits with relatives. He does this by following Plato according to the first definition, as Boethus[25] tells us; for Plato is said by him to have given the following definition of relatives: 'whatever are said to be just what they are [as being] of other things'. It seems that Boethus forgot what was said by Plato (for I would not claim that he did not know, since he was held in high regard); for that he characterises relatives not by the fact that they are *said* with regard to each other, but by the fact that they *are*, as Aristotle too thinks, he shows in the *Republic* too when he says:[26] 'but', I said, 'whenever things are such as to be of something, those that are qualified are of something qualified', and also in the *Sophist*,[27] wanting to demonstrate that 'the other' belongs to the class of relatives, he says: 'whatever is other happens of necessity to be just what it is *than* something else.'

But since Aristotle uses the plural when he says 'such things are called relatives', the followers of Achaicus and Sotion[28] thought that, although we speak both in the singular and in the plural about substance and substances, quantity and quantities, in the case of relatives we should not speak of 'a relative' and 'relatives', but only use the plural.[29] For relatives do not consist in something single in the way that the animal consists in a single substance, but in more [than one]; e.g. father-son, half-double. For things that are relative to each other are not single, nor could one speak of a thing that is relative to each other, but only about things that are relative to each other. So in this way we cannot speak of the thing that is relative, but only about things that are relative. Noticing this they criticise the ancient commentators on the *Categories*, Boethus, Ariston, Andronicus, Eudorus and Athenodorus[30] for neither noticing nor making a clear indication, and for using the terms indiscriminately, and sometimes expressing what is relative in the singular, although Aristotle always uses the plural,[31] viz. 'such things belong to the class of relatives', and again 'the disposition of relatives', and again 'contrariety exists among relatives too', and 'each of the two relatives is a contrary', and next 'not all relatives have a contrary' and subsequently throughout his discussion he mentions them in the plural and nowhere in the singular. For even if he says[32] 'But this, at any rate, is not what being relative is' he is not speaking of 'the relative' in the singular, but of 'Being', as if he were saying: 'but this, at any rate, is not what Being is for relatives.'

Porphyry records these discussions as if he is satisfied, but Iamblichus says: 'such [a view] conflicts with both correct reasoning and the usual terminology of the ancients; for they use it[33] both in the plural and the singular as is clear from the words of Archytas and

Aristotle and what Boethus and the others, copying the ancients, quote, using both ways of speaking equally. The argument requires each category to be both one and many: one in so far as it is a genus, many in respect of the plurality of things included in it. Therefore relatives too will be many in respect of the plurality of things which have the relationship and are spoken of in relation to each other, but are thought of as one in respect of the single relationship which is inherent in many things in the same way. For in this respect their category is one. He adds that every relationship, when considered in many things, is determined within a single particular feature, viz. the relational (*skhetikê*). But it is not surprising that, just as it is not possible to speak of that which is relative to each other in the singular, so it is not possible to speak of that which is relative to something in the singular. For we are taking the things that partake of the relationship, and not the relationship itself. But the person wishing to distinguish the categories according to the nature of things that exist ought to pay no attention to the inconsistency of common speech. For many things which are singular by nature are spoken of in the plural, e.g. Athens or Thebes, while many things that are plural by nature are spoken of in the singular, e.g. an army or a tribe. Aristotle himself at the outset,[34] when he was listing the categories, seemed to be speaking more in the singular, just as he does with the items before it in the list: 'it signifies either Substance or Quantity or Quality or Relative', and again:[35] 'an example of Relative is double, half'. But here he speaks of relatives in the plural because this makes for clearer understanding. For it is through the things that have the relationship that the relationship itself is more satisfactorily revealed.

That is what Iamblichus writes. But perhaps, even if it is possible to consider the particular feature of relatives in the singular, even so [we can only consider it] like the unique particular feature of three and each of the numbers that subsist in plurality; and even if it is possible in the case of this category, as in the case of the others, to make both singular and plural expressions, it is not in a similar way; for in that case the one was the genus itself and the many were the species (*eidê*) included in the genus, while in this case the many are not the species of things said to be relatives, but the things that comprise the relationship and in which the relationship is observed. For the feature particular to relationship alone is to consist uniquely in a plurality, which does not belong to any of the other categories. This much, then, should be concluded from what has been said, if you like: that it differs from the other categories in that it cannot be spoken of in the singular and the plural in the way that they can, since it has its substantial existence (*hupostasis*) entirely in plurality.[36]

The division of relatives, in keeping with that made elsewhere by him,[37] he has now made into the greater and shorter, the more and

less, the double and half, and so on. For all these are among relatives. He says: 'also state, condition …;[38] or all these are said to be just what they are [as being] of other things'.

The divine Iamblichus writes:[39] 'the division of the Relative is made into (a) those based on excess and defect, which includes the double, the multiple and in general the much: (b) those based on equality, which includes the equal, the like and the same; (c) those which lie in activity and passivity, e.g. what is such as to warm and what is warmed – the one in terms of potentiality, the other in terms of actuality; (d) that based on privation of potentiality, e.g. that which cannot be seen in relation to what cannot see; (e) that based on what judges and is judged, e.g. measure, perception, knowledge – for all these stand as what judges in relation to what is judged; (f) those based on reference to the genus, as literacy[40] is relative to something on the basis of reference to the genus, i.e. knowledge, as virtue and vice are relative on the basis of reference to the state (*hexis*), which is a relative. The things that are now being spoken of fall under this division; the other items are obvious, but it is possible to put position and condition under Passivity, and to class state as based on judgement.'

This is what Iamblichus says; it is worth asking – even if everything is subsumed under the items mentioned[41] – what is necessary about the division presented either by him or by Aristotle. For this seems to be some sort of list, but not a division. So perhaps Aristotle made the division according to the categories, first according to Quantity, and first in this [part of the division] according to the indeterminate – for the greater is of this kind – and then according to the determinate, as the double is; and secondly according to Quality; for state and condition belong to Quality; state could belong to Possession too, just as condition to passivity; perception and knowledge, when considered in terms of actuality, [could belong] to Activity, and position to Posture; things seen in terms of privation could correspond to each of the categories.

But in this way things considered as substances, such as father and son, have been omitted, and so have things belonging to Where, as 'up' and 'down' have been said to be among relatives.[42] 'When' by contrast, whether it is indeterminate like 'in the past' or determinate like 'yesterday', is spoken of *per se* and is not a relative. So perhaps not even the substance according to its own definition can admit the description 'relative', when considered as subsisting *per se*, but rather the great mountain [is considered] in terms of Quantity, and the father [is considered] in terms of begetting, viz. Action, just as the son can be [considered] in terms of being begotten – which comes under Passivity. These questions need further examination.

But now the general description must be clarified. The words 'such

things as are said to be just what they are [as being] of other things' reveal that relatives are referred to something else in accordance with their own nature, just as Socrates, in so far as he is a man or a philosopher or snub-nosed or something similar is spoken of *per se* and is not referred to as something else; but if you call him a father or a son or a teacher, these terms are related to something else. For the father is father of a son, and the son is son of a father, and the teacher is teacher of a pupil. So whatever is said in terms of its own nature to be of something else belongs among relatives. But since not everything that is spoken of as relative to something else is spoken of [as being] for or of something else in this way,[43] but some are said to be of something else in terms of the genitive case as the greater is greater than[44] the less and the less is less than the greater; others are spoken of in terms of the dative case, as the equal is equal to what is equal and the similar is similar to what is similar; yet others are spoken of in terms of both genitive and dative cases, as the greater and excessive is both greater than something else which is exceeded, and is greater than what it exceeds by[45] something else, viz. by being greater than what it exceeds, for instance ten is greater than seven by three. Other things [are spoken of] in terms of neither the genitive nor the dative case, but with the preposition 'in relation to' (*pros*[46]), as the great is not great of or than the small, but is called great in relation to the small, and the small is called small in relation to the great, and the small grain is spoken of in relation to the large grain; but what is cut is said to be cut by what cuts in a different sense, as what is moved [is said to be moved] by what moves [in a different sense], and some things are said [to be affected] at the hands of,[47] as the gift is given at the hands of the giver. Since, then, the referral of relatives to something else is multiform, it was not sufficient to say 'such things as are said to be just what they are [as being] of other things', but he also says 'or which in any other way at all are relatively disposed towards something else', i.e. whether the reference is in terms of genitive or a dative case, or not at all in terms of a case but in some other way,[48] as stated. So whether the definition is Plato's or anyone else's, it does not have the addition 'or which in any other way at all are relative to something else' as an amendment, but this is part of the definition. Aristotle clarifies this by means of the examples adduced when he says 'for example one mountain is said to be large relative to another (*pros heteron*)', using a different means instead of expressing it through a case ending. 'The similar is said to be similar to something' because certain things are also expressed by means of the dative case.[49]

Yet Boethus wrote a whole book about the Relative and that which is relatively disposed. He thought that the definition which was given by Plato went as far as 'are said to be just what they are [as being] of

other things', but that the rest was added by Aristotle by way of correction. But the definition seems to have been given in its entirety by whoever gave it, but to have been clarified by means of the examples previously adduced which suited the words 'are said to be *of* or *than* other things'; 'for example the larger', he says, 'is said to be than something, and the double of something else'. Then the words 'related to them in any way at all' apply to 'for example a mountain is said to be large relative to another one, and the similar is said to be similar to something'.

But Boethus criticises the full definition as well when he says: 'the argument put this way seems to be at fault; for the relatively disposed, when defined, should not have included that which is relatively disposed to something other. For that was just what it was proposed to define; nor should the relative, when defined, have included "other" or "else" in the definition;[50] for these too belong among relatives.' But he seems unaware that the definition is invalid not when it is written down by means of things of the same kind which are brought into the account (for the given definition of the man, who is a substance, is 'rational mortal animal' and is presented in terms of substantial things), but when one name is given instead of another – for example if one were, in defining the man, to give the name 'human being'.[51] Consequently, if he had said that what is relative to something is relative to something else, there would have been one name instead of another; but if he defined them as being called just what they [as being] of other things, that is a general description and not the substitution of a name. So it is no surprise that the general description is completed from the parts of the Relative. [Boethus] himself goes on to claim in his defence that it is necessary to present the general descriptions of the primary genera by means of the things which are posterior to them as well as themselves.

Since Aristotle says that both state (*hexis*) and condition (*diathesis*) are among relatives, it is worth asking whether state is spoken of in relation to what is havable (*hektos*) and what is had, and condition in relation to what is conditionable (*diathetos*) – just as perception is spoken of in relation to what is perceptible and knowledge to what is knowable – or whether state is spoken of in relation to the haver (for state is of the haver), while condition is spoken of in relation to what is conditioned – just as position is of what is placed. Aristotle and his commentators now seem to accept them more in this sense.[52] For if state consists in being had, it would be spoken of in relation to the haver rather[53] than what is had by it.[54] The philosopher Syrianus[55] asks why perception is said to be relative to the perceptible and knowledge to the knowable, while state is not relative to the havable but to the haver; he says: 'perhaps [it is] because perception is directed to the perceptible as to something desirable, and knowledge even

more so to the knowable, while state and condition are not directed towards anything, not even those of the body,[56] but are *per se*. It is because desirable things are determinate that [perception and knowledge] are said to be relative to them; but the havable and the conditionable are indeterminate, and for that reason state and condition are not spoken of in relation to them, but rather to the haver as being determinate.'

This arrangement follows on what is said in the *Topics*.[57] But in the fourth book of the *Metaphysics*[58] Aristotle himself says that not even these can be spoken of in relation to the haver, but in relation to what the actualisation is directed towards, i.e. the state towards the havable and the condition towards the conditionable. For when state and condition are spoken of as being of the soul, they are like that in virtue of participation, since the soul has the state or condition, just as the body has the cloak; they do not belong among relatives, but, as they are accustomed to say, among what is deficient because they are partaken of. But when the state is taken as being between the haver and what is had, it is no longer considered as being had; for the state (*hexis*) is not had (*ekhetai*) – so as not to get into an infinite regress – but such a condition is a relationship and relative. Similarly position (*thesis*) and condition (*diathesis*); for that which is spoken of in terms of deficiency in relation to the fulfilment of something is one thing; another is what is considered in its relationship towards something and in something and of the relationship of something else to it. So even if the same thing is a quality or relative to something, as state is, they must be distinguished, defining it as a quality on the one hand in terms of deficiency, and as a relative on the other hand by its relationship to something else and in something else, and the relationship of something else to it.

Having said 'said to be of other things', he added 'and not something other'[60] on account of the contraries. For they too are of something else, their contrary. For the contrary is the contrary of a contrary, and in that respect it is also relative to something; but it is also something other, – for it is white or warm – while what is relative *qua* relative is nothing other than what it is said to be; for [it is] 'on the right' or 'father' or 'more', in so far as it is relative, and nothing other, as 'white' and 'warm' in that case are.[61] He says that 'lying down', 'standing' and 'sitting' are among relatives because 'they are positions'.[62] For each of these reveals position of a sort, and position is among relatives; for position is the position of the positionable, and the positionable is positionable by position. If position is one of the relatives, the species of position are also among relatives; for 'lying down' is *of* the person lying down, and the person lying down is lying down *by* his lying down, and similarly in the case of the others.

But it is worth noting why he said that they belong among relatives

not *per se*, but through their reference to position. This caused Iamblichus to say that they were one species of relatives in terms of their reference to the genus,[63] because those [verbs] from which they are named, viz. 'to lie down', 'to sit' and 'to stand', are not among relatives, but are subsumed under Posture. For if 'to stand' (*hestanai*) is derived from 'standing' (*stasis*), and 'to be seated' (*kathesthai*) from 'sitting' (*kathedra*), and if nothing paronymous (*Cat.* 1a12) is in the same category as that after which it is paronymously named, just as the literate man is not in the same category as literacy (since the latter comes under Quality and the former under Substance), so 'standing' comes under Relation, but 'to stand' under Posture. Because, therefore, 'to stand' and such things are paronymously derived from 'standing' and similar things, he subsumed them under the Relative, not because of themselves, but because of position (*thesis*), which is more evident. For 'to lie down' and 'to stand' are not positions, which is why they are not relative, but they happen in accordance with (*kata*) what is relative. For that which has a posture does not have a posture *by* position, but *in* position. That is why 'standing', 'lying down' and 'sitting' are none of them said to have a posture. Is the fact that they are paronymously said the reason? Not in every case. For 'the wing' and 'the winged' are said paronymously, each after the other, yet both are in the same category.[64] But it is because that which is paronymously named *after* something comes to be in a different category, just as 'that which lies down' is named *after* 'lying down'.[65] If we distinguish paronyms more accurately we will not say that they come under different categories except when one of them is displaced into another genus. Why then does he say:[66] 'This sort of thing too is among relatives'? The answer is that because some of the things listed, such as state, condition, perception and knowledge, in so far as they are qualified, are also in the category of Quality while position is akin to Posture, and because he mentions them as also being among relatives, this is why he said that such things are also among relatives.[67] So much for the wording.

With regard to this question the Stoics[68] number two genera instead of one, putting some items among things that are relative and others among things that are relatively disposed. They contrast things that are relative with things that are *per se*, and things that are relatively disposed with things that are differentiated. They call 'sweet', 'bitter' etc. – such things as [Aristotle] disposes[69] in this way – 'relatives', and they call such things as 'on the right', 'father' etc. relatively disposed. They say that what are characterised by some form are differentiated. Therefore just as there is one concept of what is *per se* and another of what is differentiated, so some things are relative, and others relatively disposed. The consequence of the pairings is reversed.[70] For differentiated things extend as far as

(*sunuparkhei*)[71] things that are *per se*. For things that are *per se* have certain differences such as white or black. But things that are *per se* do not extend as far as differentiated things. For 'sweet' and 'bitter' have differences, by which they are characterised, but are not such as they are *per se*, but relatively. But things that are relatively disposed, which are antithetical to things that are differentiated, are necessarily also relative. For 'on the right' and 'father', as well as being relatively disposed, are also relative. But 'sweet' and 'bitter', which are relative, are differentiated things, while what are relatively disposed are antithetical to what are differentiated. For things that are relatively disposed cannot be *per se* or differentiated. For they depend solely on the relationship to something else. But things that are relative are not *per se*, for they are not absolute but will always be differentiated. For they are considered together with some characteristic.

Perhaps I should rephrase what I am saying more clearly.[72] They call relative such things as are disposed in a certain way because of their own character but which are directed towards something else, while such things whose nature it is to be, and to stop being, an accident of something without change and alteration in themselves, and to look outwards,[73] these things they say are relatively disposed. Consequently when something differentiated[74] is directed towards something else, it will only be relative to something, like state, knowledge and perception. But when it is considered not in terms of the inherent difference, but purely in terms of its relationship to something else, it will be relatively disposed. For 'son' and 'on the right' need certain externals for their existence; that is why, although no change takes place within them, the father could come to be no longer [a father] when his son dies,[75] and [the person on the] right could come to be not on the right when the person next to him changes his place.[76] But 'sweet' and 'bitter' would not be altered unless the power within them were altered with them. So if they, even without themselves being affected, alter on the basis of the relationship of something other to them, it is clear that things that are relatively disposed have their being only in relationship and not according to any difference.

In reply to such fine distinctions in the division of the one genus it must be said that the difference between what is relative and what is relatively disposed is not according to realities but only a matter of vocabulary. For both exist equally because of some inherent difference and because of the relationship to something other. But on some occasions the difference presents itself more strongly, and on others the relationship does; but this does not create a generic distinction.

167,1 It is agreed by all that in the case of relatives the relationship comes into existence with the particular characteristic; Boethus gave

adequate proof that for things that are relatively disposed it is necessary that some character should be inherent in the subjects. And this is self-evident. For the relationship to something else does not have a nature *per se* [such as] to exist, but it is necessary that it should be inherent in the differentiated characteristic. But this characteristic is on some occasions a quality, (as 'whiter' is what it is together with the colour) and on some occasions a quantity, (as in the 'more and less') and on some occasions a movement, (as in 'swifter') and on some occasions a time, (as in 'older') and on some occasions a place, (as in 'higher'). But 'on the left' and 'on the right' exist with more differences; for they are manifested together with place and with a part of such-and-such a kind. For 'on the right' and 'on the left' are so-called because we have parts of this kind, since one stone will not be on the right in comparison to another unless someone compares it in relation to our right and left hand.[77]

The relative presents a paradox in the case of sameness.[78] For sameness is not spoken of in relation to something else, but to itself. At any rate that which simply *is* and not 'in some respect, in some way' is the same. In this way the relationship always co-exists with the characteristic features of the difference, and these are not two things, as they suspect, but the conjoint is one.[79] It is also a ridiculous consequence for them to make the genera compounds of certain priors and posteriors, in the way that they make the Relative out of Quality and the Relative.[80] But concerning the consequence[81] it is neither the case that the Relative follows from what is relatively disposed, as the Stoics say, while what is relatively disposed is not posterior to what is relative, nor is it the case that, as Boethus says in their defence, 'what is relatively disposed is consequent upon what is relative; for these things, together with being relatively disposed towards something else, have taken on in addition their own difference. But the Relative is not posterior to what is relatively disposed. For it is not inherent in all relatives to be spoken of as being relative to something else by the relationship, and having their own difference.' But it would be better to say that these are reciprocally implied in each other, so that if anything is relative it should also be relatively disposed, and if something is relatively disposed, it should also be relative. For there must be both the directed (*epineuousan*) power viewed in terms of a difference, and the direction (*epineusis*) itself, viz. a relationship. If either of these two is deficient, such a category is not preserved; for neither the relationship exists purely *per se*, nor does the difference apart from the relationship constitute this category. But we should not separate the difference and the relationship from each other, but should consider in terms of one single conjoint common feature both the relationship of the possessor and that to which it is relatively disposed. That, then, is a sufficient reply to the Stoic hypotheses.

Iamblichus examines the question in itself, [asking whether] (a)
168,1 what produces the differentiation amongst relatives is the extent to which some reveal more their character, such as 'sweet' and 'pleasant', while others reveal rather the relationship,[82] such as 'father' and 'son', while others lie equally between through the quality in them and their relationship to something else, such as 'whiter' – and if there
5 is a differentiation whether this is generic or because of something else which falls within the genus; or whether (b) in general there was no distinction either in terms of the genus or any other difference. Having asked the question he says the one solution in all cases is to know the nature of the relatives, because the relationship of relatives is not completed according to the things that combine or the excesses or the equalisations or the deficiencies among them, but the particu-
10 lar character of relatives is considered according to the very account (*logos*) of the relationship, bringing together into community things that differ in any way at all, and defining them according to that community.[83] But such variations are seen because of what partakes of the relationship and are seen within it, with the items being in excess, deficiency or equality and having many differences in terms of the actual things, differences which are not differentiated accord-
15 ing to that one genus of Relationship which is entirely separated from the variations in the compounds.[84]

Several things, such as 'more', 'double', 'state', 'lying down' etc., are said by Aristotle, in this passage, to be relatives; other examples are given by him which we have noted above, items viewed in terms of excess and deficiency, capacity and incapacity, and the like. But
20 Plotinus[85] is uncertain just what the common feature is in all these. [He asks whether] it is something generic or is [to be expressed] in some other terms – [i.e.] in terms of its reference to something single as we say that the descendants of Heracles[86] are all related to the one common [ancestor] Heracles. For if we seize on the things that underlie and have the relationship[87] – some of which are in [the category of] Substance, others in [that of] Quantity, others in other [categories] – relatives will vary together with those other things. But
25 if it has nothing in common with the items that have the relationship and if the category of relatives is unrelated (*askhetos*),[88] then those items will not have relationship nor will they be relative, nor will that be a common feature of them. So perhaps it must not be altered along with realities nor cut off altogether from them, but transcending (*exeiremenon*) the differences it will maintain their mutual community by means of the very character of the relationship. For if it, being
30 one, is present as the same feature everywhere in the things which differ and are contrasted with each other, it will be separable and superior to the contraries; consequently it would not be contained by any one of them nor prevented from being present to the other. If we

are right in saying this, all the differences of relatives – however many and of whatever kind – will all be arranged under the one separate category, and that category will in no way depart from its nature because of the differences in the things which participate in it.

They find another difficulty:[89] Is this relationship something with substantial existence (*hupostasis*), or just a name expressed [when something else is expressed]? It is necessary, then, either that relationship should not be one of the things that exist, or else that some relationships should exist while others should be non-existent. But that we should not remove all relationship is clear from the fact that, just as Substance, Quantity, Quality and each of the other categories must be put among things that exist, so too must Relationship, since it too provides much benefit. For (a) neither the genera nor whatever things are subordinate to them will have any community with each other unless there is some account taken of relationship among things that exist.[90] It would be absurd to remove the community of things that differ from each other, and absurd too to remove consonance – not only that in sounds and numbers, but also that in substances and all potentialities and actualities – which, when it comes to be present in beings, brings them to sameness and produces relationship with each other. Commensurability, the equal, the knowable and knowledge will also be removed; and (b) if geometry and music are to do with relationship, and if these are without substantial existence, then it would be laughable for them to waste their time over things without substantial existence. (c) How can God be said to be the object of desire for all things[91] if there is no relationship between the object of desire and the desirer? (d) Further, since among beings some are prior, others posterior, if there is no relationship, the relationship of firsts to seconds and that of seconds to firsts will be removed; and if it is removed no association is left for them any longer; for there can be no unity between them (for body, soul, Intellect and God[92] are not of the same substance) nor any fellowship in nature (for they are not of the same nature); but it is only according to relationship that the association of things that differ in this way can exist. 169,1

If then this is absurd, the genus of relationship is something manifold, not only among perceptibles but also among intelligibles and the bodiless which comes after the intelligible.[93] Therefore everybody has use of it, and it is impossible to discourse about anything without relationship. But somehow or other they do remove it and object to its having substantial existence, not realising that the same and the different – without which we cannot say anything[94] – are the particular features of the relationship of relatives, and (e) that the constitution of compounds, which occurs because of the combination of things that differ, owes its being to relationship.

But, they say, the contraries will be to do with the same thing if we say that relatives enjoy substantial existence; for when the same thing, in relation to one thing or another, is greater or less, the same thing will be greater and less. But this is nothing absurd, if [it is greater] in relation to one thing and [less] in relation to something else. For contraries would be to do with the same thing if the same thing[95] could be equal and unequal to the *same* thing.[96] But it is possible, they would say, for it to become greater or less than the same thing by addition or subtraction. Now not even that is absurd; for the less supervenes when the greater is removed; consequently the contraries are not present simultaneously. It is clear that not all relationship can be removed; and if we leave relationship to any degree whatsoever, we shall admit that the category of Relatives, under which all relationship is subsumed, does enjoy substantial existence.

But why, they ask, does Aristotle, when setting forth the categories in the *Eudemian Ethics*[97] and the *Metaphysics*,[98] not mention Relatives, if in fact he thought that this genus has substantial existence just as much as the others? The answer is that where the argument is not primarily about all the genera he does not speak precisely about them all, but makes use in particular of those which are necessary for the subject in hand. Perhaps, because relatives have substantial existence in other categories, for that reason they are considered together with them, even if they do not get special mention.

They raise the following further difficulty[99] about common related existence. They say: 'if things in a relationship are conjured up,[100] it does not thereby exist; and if a common signification of things without substantial existence occurs, they do not thereby come into existence. This is clear in the case of things where only some reference to what once existed persists and the relationship is conceived of in this way because he has died – although the child no longer exists. The relationship is spoken of in this way from the memory of those who saw the dead child or heard about him. So if there can be no substantial existence of a relationship between what is and what is not, even if there appears to be, even in the case of things that do exist our opinion would not guarantee substantial existence. The relationship between certain things persists up to a point and then stops, as in the case of an orphan [who is only legally an orphan] up to his eighteenth year. For as soon as he begins to produce children he ceases to be called an orphan. Therefore if earlier on he had a relationship which changed without an intrinsic difference but only as a result of the passage of time, how could he have a relationship which has real being? What was previously on the right, without itself changing,[101] becomes on the left, and changes its relationship when something else changes its position. It is difficult, therefore, to admit the substantial existence of the relationship, difficult too to indicate what is the

common feature which relationships get from each other.[102] For this feature can be neither body nor bodiless. For if it were body, it would not be perceived in different bodies; if it were bodiless it would be either inside or outside whatever had it; and if the relationship were different in the case of each of the things partaking of it, it would be homonymous and the Relative would no longer form a single genus; and if it were the same on all occasions it would be synonymous and could be a single genus separated by differentiae – but it is hard to discern how we are to divide it. For how is it that some relatives are no more revealed than their subjects, e.g. the like and the equal, while some are active but come into existence as different in their activities?[103] For the sweet [is revealed] by acting in such a way on our perception, the incisive by acting [in such a way] on body, father and son by acting on each other – the father providing the starting point of the son, and the son the completion of the father; consequently what has come to exist provides only the name to the father, the other provides substantial existence.[104] How on the other hand could these belong to the same genus, being proximate subordinate species? Furthermore, does the double bring along with itself the half, or the half the double, or are both of them co-existent? Or are some relationships produced in the one way, others in the other? And do relationships supervene or not?'

These are some of the problems concerning the substantial existence [of relationship]; it must be said that just as qualities, being conceived of apart from bodies according to their own nature, are bodiless, so too relationships, being conceived of apart from compounds according to their own nature, are bodiless. For the relationship is an account in its own terms, and this account has as a particular feature the substantial inclination (*hê ousiôdês aponeusis*) of its own difference towards something else.[105] The difference should be taken not only in so far as the Relative differs from qualities and substances, and in so far as it differs from all beings of any sort whatsoever. For the form of relatives is marked off in accordance with the relational account of the difference. Therefore in so far as they have their own difference, they are like the other genera, but in so far as they refer to something else and do not stand within themselves, by this special feature they differ from the others. Therefore we should take not that which is inclined, but the reference to something else itself, to be the relationship, either being in something else and relative to something else, or in itself as being relative to something else. So much for their substantial existence.

Since relationship is in something else and relative to something else, for that reason the coming-to-be and passing away of relatives depends on the things to which they are relatively disposed; even if they are not affected *per se*, when these change, they change with

them. In this way, then, relatives change in the way that is natural to them. Therefore we shall understand the change of what is on the right and of the father and of the son in so far as they are such; for the change of the father is the alteration of the son, and similarly in the case of what is on the right. The same argument applies in the case of everything which is relative; for since their nature is in something else and in relation to something else, when that something else changes, they too change. Many people are disturbed by the fact that they cannot observe the change in such cases. But one has no right to require this. For we must consider change in the case of these things not in so far as they exist *per se*, but in so far as they are relative. For if they are counted among beings through their being relative to something else, in what way is it surprising that the change in that something else and alteration in it becomes also an alteration in that which is relatively disposed? For we should consider the change in it not *qua* quality or quantity, but *qua* something which is relative. Consequently it comes-to-be and passes away along with the change and alteration – but only the one appropriate to it.

The Stoics are wrong to think that things that are relatively disposed are free of any particular differentiated feature because they by nature come and go as accidents[106] with no change occurring in them; this is wrongly said, since even in relatives change occurs in the way that is natural to them. Either they subsist in qualified things and the other genera, and have their own substantial existence in them, or else they have a substantial existence to a greater degree, being separate like a *logos*; in both cases relatives have the sort of substantial existence that we said[107] is constituted from difference and relationship together. Let this be sufficient indication that things that are relative to something do exist, and what sort of nature they have.

There is still the question:[108] what is the common feature in the case of all things that are relative to something and which have so great a difference? Some resolve this by saying that they can be reduced to a single similarity of expression and particular feature of signification. Therefore what they have in common is said in accordance with the significations shared in common, however these may be observed within them; for instance 'being said *of* something else' or 'being said *with regard to* something else', in whatever way, either because a thing belongs to something else, or because another thing is relatively disposed towards it. For things viewed in terms of a similarity of signification are subsumed under the same common feature even if they do not have the same nature. For this reason we sometimes put in the same genus negations and things paronymously named, since they are to do with the same things as the affirmations, and what the affirmation signifies as being in existence, that the

denial signifies as being in non-existence; but this is classified in the same category in no way by its substantial existence, but by a similarity of signification. But they reject such a solution on the grounds that it surrenders, through similarity of expression, to the problem which itself says that [the relatives] are classified under a single common feature. But there must be some genus of relatives, from which the variations among the things that are relatively disposed, considered according to species, are divided off. For they are not focal equivocals,[109] but they [exist] in so far as the same account of relation is conceived in all of them; and it is in accordance with this account that the common genus is determined, as in the case of the other categories. We must divide what is *per se* relative from what is *per accidens*, so that we should not go wrong in often shifting from one genus into another. For because what is *per accidens* is always concomitant to something prior, for that reason that which is prior will dominate. But what is *per accidens* will follow in a different manner, and would no longer be what it appears to be. Let items such as the equal and the like be spoken of as *per se* relative; for these have relationship as something prior and have substantial existence because of it, and are not considered as being in relationship because of anything other. But the man would be said to be relative *per accidens* because it is accidental to him to be double.

After these common problems and their resolutions let us not omit 173,1
those problems that are raised on particular points. For they say:[110]
'the similar is nothing except the quality which is in each of the two things, which pre-exist the relationship. The relationship would be nothing more than some judgement on our part when we compare things that exist on their own and when we say "that and that have the same magnitude and the same quality"; and what would sitting', they say, 'and standing be other than what is sitting and standing?' In reply to all such objections we must give a common reply; that if the judgement is wrong and the conception of these things erroneous, then relationship would amount to nothing. But if it is correct and if we conceive of the like and the equal and position as being something, we must trust our thoughts, since they announce real beings, and we must place relationship among beings, and the Relative in a special existence. For qualified and quantified things are what they are *per se*, but things are not called like and equal before they participate in the relationships which are in accordance with them. For the equal is something other than the quantified, and the like is something other than the qualified – what sameness is called in the case of things that are distinct, but equal or similar; it too has a substantial existence which is not consequential but prior along with the prior genera – these too are given their form by this [substantial existence]; quantities are brought to commensurability in terms of the equal,

qualities are completed by the like, beings are defined with regard to sameness not according to relationships which supervene and exist together with them, but those which are prior to the beings or co-exist with them. In cases where we say that 'this caused this' and 'this controls this' we are not bringing together things pure and simple, but we are considering some intervening function which joins the agent to the patient and the controller to the controlled.[111] For there needs to be a common link between instigator and result. But the man who does not allow for standing and sitting seems to be following some Stoic mode of speech in thinking that there is no single thing other than the subject, and in considering that its differences are without substantial existence and in dismissing them as relatively disposed on the grounds that they have this relative disposition in their subjects. But if standing is one genus of Being, and if the establishment of one thing in another [is too], and if the genera have their individual existences,[112] then standing will be different from the person standing, and sitting different from the person sitting, and what is partaken of will be prior to what partakes, and what is *per se* will be prior to what is in other things.

'But', they say, 'the state *(hexis*) which is named after what is possessed, like the possession (*hexis*) of weapons, in Plato's phrase,[113] would be a quality, while that in terms of possessing would rather signify having.' But we should not think separately that which is possessed and that which possesses, and conceive of relatives in this way, but rather as that which is between that which possesses and that which is possessed, viz. that which is considered in terms of their connection to each other.

In the case of condition (*diathesis*) we must consider what is common to what is conditioned and that by which it is conditioned, which exists in terms of the relationship between them. 'But', he says,[114] 'right in relation to left, and in front in relation to behind, would better be spoken of under Posture, since one thing is over here, and another over there – but it is we ourselves who think of them as on the right and on the left, and it was similarly we ourselves who added prior and posterior.' Again this much must be said, that if we are correct in speaking and thinking of these terms as [predicated] of something, then relationship is something; otherwise not. But if these have some determinate nature even when we are not speaking or thinking about them, then it is obviously absurd to measure them according to our own position. So much for the problems on particular points.

Eudorus is critical, asking why, although the relative is contrasted with the *per se*, Aristotle has discussed the relatives and not the *per se*. It must be said that the [other] nine categories are considered as being [within the realm of] what is *per se*. Therefore establishing the

per se throughout these nine categories he adds that of the Relative as an appendage to these nine. For relative is considered as being among the other nine with some ambivalence in the case of Substance, as he will say, but with none in the case of the others; for example 'state' [is found] in Quality, 'double' in Quantity, 'further and nearer' in Where, 'older and younger' in When, 'burning and cutting' in Active and Passive (in their case both activity and affectivity are homonymous), 'lies on and lies under' in Posture, and in Having features after which 'having' is spoken of paronymously (such as 'being shod'); in Substance there is 'father-son'. Therefore they think, that, since the category of the Relative is an appendage to the others, it is supervenient, although it is prior and considered in terms of its own differentia. This is the common feature that pervades all things – the contraries, the things that differ in any way, all the genera and the items ranged under them; if it were not present, everything would have been torn apart from everything. And one thing is the relationship which subsists as a form and as an account (*logos*), but another is the participation (*metaskhesis*) in this relationship, which is within the participants, having its connection with Being not from coming-to-be or movement or in any other supervenient way; for it is not a distancing, a juxtaposing, a combining, a sundering, an addition, a subtraction, a positioning of parts or in general any such thing that gives relationship its substantial existence, since the same things are productive of contrary relationships, and things that are contrary of the same relationships. Strictly, then, the only cause of relationship is to partake of the form of relationship, and the Relative must be tracked down only according to relationship, and we should not include the things between which the relationship exists.[115] Of relationships those which are joined essentially to their subjects co-exist with them, such as 'on the right' and 'on the left' in the parts of an animal; other relationships abandon their subjects although they persist, as 'on the right' in terms of standing, when it no longer fits the participation in the relationship[116] (and these relationships are rather [to be considered as] accidental); others endure although the subject passes away, as that of things that formerly existed, and that of what is later to what is earlier in time because relationships have incorporeal accounts (*logous*) in and for themselves.[117] But enough of that; we should proceed to the next topic and consider how Aristotle presents the particular characteristics of things that are relative.

6b15-27 There is contrariety in relatives; [for example virtue is contrary to vice (each of which is relative to something) and knowledge is contrary to ignorance. But there is not contrariety in all relatives, for it is not found in the double, the triple or any

multiple. It seems that relatives admit more and less; for one can say 'more like' or 'less like', and 'more unequal' or 'less unequal' ('like' and 'unequal' are both relative to something). But not all admit more and less, since more and less cannot be applied in the case of the double or] any of the things of that sort.

After the definition, or rather the general description, of relatives, it was the opportune moment to proceed to what is concomitant in their case too. Some of these concomitants were common to the other categories too, but others are particular [to the Relative]; first he presents the common features, and then the particular features, since each being in its essence is comprehended by common and particular accounts.

First he says that there is contrariety present in Relatives, which was said not to be present in Substance or Quantity, but which will be shown to have very great predominance in Quality and the other categories. He says that there is contrariety present in relatives not because the Relative is contrary to what it is said to be relative to (for the opposition of relatives is one sort of opposition, while that of contraries is another, as we shall learn in his discussion of opposition),[118] but because some relatives are also contrary to each other, but not according to their description as relative, but because being relative they are also contraries. [Examples of] contraries that are among relatives, he says, are virtue and vice, knowledge and ignorance – not because vice and virtue have their being in relation to something other,[119] but because according to their generic reference, i.e. state (*hexis*), they too would be among relatives.[120] For state is of relatives.

Why, then, one might ask, does he proceed to make knowledge and virtue, and their opposites, qualities? The answer is that the same thing falls in to one category in one respect, and into another category in another respect. So these items will be qualities when they qualify, but [will be found] among relatives in so far as they manifest a relationship to something else.[121]

176,1 'But', he says, 'there is not contrariety in all relatives, for it is not found in the double, the triple or any multiple', and all these are among relatives. How then does contrariety belong and not belong to relatives? The answer is that relatives cannot be conceived of *per se* without another category, but they always co-exist with the other categories. So that is why, when they are found in a category which has contrariety, they too will have contrariety. But if they are observed in things that do not have contrariety, they too will lack it. For whatever belongs to the genus which underlies relatives, for the most part will belong to relatives themselves, so that when they are observed together in a state or in a quality in general they admit

contrariety, because they are also qualities. But when they are observed together with the double, triple or quantity in general they do not, because quantity does not admit contrariety. It is the same when they are consequent upon substance, as in the case of father and son; for neither did Substance admit contrariety. It is clear that in so far as they admit contrariety they share this with the other genera that do; but in so far as they do not admit it, they share this with the genera that do not; and in both respects they share something with all the genera together. Consequently it is not a particular feature of relatives to admit contraries; for contrariety does not belong to the whole [category] nor to it alone.

He says: 'it seems that relatives admit more and less', adding, 'seems' not because they do not in fact admit them but only seem to, but because he is explaining an ancient doctrine. They admit more and less in terms of similarity; for that which partakes of the same form to a greater extent is more similar, and that which does so to a lesser extent is less similar. But similarity is among relatives. So much is clear. But why, instead of saying 'also more and less unequal', did he say 'more unequal to a greater or lesser extent'? For if 'more unequal' is [the same as] 'unequal' with the addition of 'to greater extent', why did he say 'more unequal to a greater or lesser extent'?[122] The answer is that he introduced, on account of the rather unusual language, the word 'unequal' together with the word 'more'. Why then did he add 'less'? Because the 'more unequal' too allows for intension and remission,[123] so that [a thing] can be more unequal to a greater or lesser degree. For we do say more similar to a greater or lesser degree when one thing is more similar than something else, and this more similar thing undergoes intension and remission.

Iamblichus explains it differently, saying that [Aristotle] was demonstrating the progression of the unequal to infinity when he called it more unequal; for this never halts and never becomes great but always greater, and never small but always less in accordance with the infinite addition and subtraction.[124]

It is worth noting that he did not say more equal, but more unequal, because more and less are not observed in the equal in the way that they are in the unequal. It would also be worth asking why more and less are observed in the same way in the similar and dissimilar, but not so in the equal and the unequal. But if the equal and the unequal are particular to Quantity, how can they admit more and less if Quantity does not do so? The answer is that Quantity *qua* Quantity does not admit it, while the accidents of Quantity do admit more and less, not in so far as they are quantities, but rather in so far as they are qualities. For the equal is a similarity of quantity; the similarity is a quality, and Quality does admit more and less. Again he says: 'not all relatives admit more and less'. For things that exist in

substrates which do not have [more and less] do not themselves have them. The double, the triple and in general determinate quantities do not admit more and less; for what is already determinate does not admit indeterminacy in terms of more and less.

But we must turn back to the objections which have been mentioned concerning the concomitants, and to the resolutions of those objections. One might find it problematic how virtue and vice are among relatives. For to be 'of' something, e.g. of the good man or bad person, was indicative of participation, not relationship. It would be possible to repeat what was said earlier,[125] that these things are relatively disposed because of their reference to the genus; for state is considered not only as being participated in, but also in so far as it is relatively disposed to what is had and what has, and in this respect it is relative. But it is possible to say that virtue and vice are among relatives in a different way, in that being qualities they are also intermediaries of a sort, the former as commensurability, the latter as incommensurability.[126] For the mean has a relationship to the extremes, and commensurability has a relationship to incommensurability, and incommensurability to commensurability. Consequently, in so far as they are qualities they are contraries, and in so far as they are intermediates they are relative.[127] So there is also no need to find it problematic how, when the opposition between relatives is one thing, and that between contraries another, the oppositions will not be confused, given that there will be contraries among relatives. For they are not contraries in so far as they are relative, but as [Aristotle] himself says, 'there is contrariety in relatives'; for some of their substrates, in so far as they are qualities, have contrariety, but not in so far as they are relative.[128] For the contraries are not relative in so far as they are contraries, nor are things that are relative contraries [in so far as they are relative]. In general [states] are relative in so far as they are states, but a state is not the opposite of a state, but they have contrariety in that they are states of a certain kind, that is to say in that they are qualities. They indicate that knowledge and understanding and cognition either differ only in sound, or else (since we say that understanding is that which considers the species, cognition that which considers genera,[129] and knowledge that which transcends these [two]) it is not only a question of sound but that there is some real difference between them. 'But', they would say, 'no relationship admits of intension and remission; for [all relationships] are [directed] in the same way towards something else'. The answer is that they admit more and less not in so far as they are relationships or relative to something, but in so far as they are of such a kind and quality. 'But', they say, 'more and less are not observed only in the qualities themselves, but also in quantities, as in the equal and the unequal, the greater and the smaller'. The answer is that

these are quantitative qualities, and intension and remission occur according to the quality. If anyone thinks that the double admits intension and remission because of the increase or decrease of the numbers in the same proportion, so as to think that the double in the case of 200:100 is more than that in the case of 4:2, he fails to realise that both in larger and smaller numbers the proportion is considered the same, as admitting neither intension and remission.

We should realise that of these concomitants Archytas said nothing about the reception of contraries, although he mentioned it in the case of Substance and Quality. [He says]: 'for we must attach certain common features to Quality, viz. admitting some contrariety and privation.' But he did allow the more and less, saying: 'that which is relatively disposed to something other admits more and less; for to be greater than something is [to be] to a greater extent, as is [to be] less than the same thing, but not in every case of that which is relatively disposed to something other; for it is not possible to be more or less a father or brother or son. I say this not taking account of the dispositions of the characters of the two – how kinsmen and brothers are well-disposed towards each other – but the very concept of their nature.' Why then did he omit the contraries? The answer is that they do not belong to relatives *per se*, but *per accidens* because they are in the subjects. So he took care in case anyone should confuse the intermediaries[130] and their subjects, and either remove the intermediaries leaving nothing but the subjects, or else reveal that they are 179,1
the combination of these, although the intermediary is a single common genus which binds the extremes together, different from these extremes in which the contrariety is observed, being observed in terms of the qualitative and not in terms of their relationship. So that is why he said nothing about the contraries, but did allow the more and the less as being appropriate to some of the relatives. For since there are some items in such a category which exist in the genus of the infinite, in which more and less, very and hardly and the like proceed, subject to intension and remission indefinitely, he quite reasonably supposed that more and less are connate with the Relative. For instance the greater and the smaller, in the case of which he himself put forward the examples of more and less, belong to the nature of the infinite. But since other species of the Relative are akin to the limit, they will have their category determinate and will not admit intension and remission. They are the sort of things akin to Substance, like father and brother, because their Substance is determinate and does not admit more and less, and likewise [does not admit] equal or double. But since some are often led astray to common features that appear to be *per accidens*, for that reason he added that we should not consider their dispositions, how well-disposed they are to each other. For these dispositions are considered rather in terms

of quality, and we ought not to consider relatives as qualities, but as he himself says 'we ought to look to the very conception of nature', and to examine strictly the relationship itself in so far as it is a relationship. But this distinction requires us, in the case of the other categories too, when we consider their common and particular features, to observe the genera pure and simple, and not mixed up with the others.

6b27-36 Everything that is relative to something is spoken of in relation to a correlative that reciprocates; [for example the slave is spoken of as the slave of a master, and the master as the master of a slave, the double as the double of half, and the half as half of the double, and larger as larger than the smaller, and smaller as smaller than the larger; this holds good in other instances too. Sometimes however there will be a difference in expression because of the grammatical case; for example knowledge is said to be knowledge *of* the knowable, but the knowable is knowable *by* knowledge, and perception is perception *of* the perceptible, but] the perceptible is perceptible *by* perception.

After dealing with the concomitants which relatives have in common with the other genera, he now proposes to present what is particular to them. This is the fact that they are spoken of in relation to correlatives that reciprocate, when a thing (B), relative to which a thing (A) is spoken of, and a thing (A) spoken of as relative to it (B), are [both] reciprocally predicated, as in the examples offered. For just as the slave is spoken of as the slave of a master, so too the master is spoken of as the master of a slave; in the other examples the predication applies equally in either direction; that is why it is also called reciprocity, when just as A is reciprocally predicated in relation to B, so B is reciprocally predicated in relation to A. He said that 'this holds good in the other instances too', since the proffered examples engendered the reciprocity using the genitive case in a way similar to the [discussion of] the category at the start; but this is not so in all instances, since some reciprocities occur using the dative case, as when we say 'knowledge is knowledge *of* the knowable, but the knowable is knowable not *of* knowledge but *by* knowledge'; so he quite reasonably added 'except sometimes there will be a difference of expression because of the case ending', since in terms of the items themselves no variation of the relationship occurs (for they remain the same in so far as they stand in a certain relation), but the change is made in terms of expression alone – sometimes we express the reciprocity with the same case ending, as with master and slave, father and son, sometimes with a different one, as was said with knowledge and the knowable, and sometimes the second item of the pair does not admit expression [by case ending] but needs the

preposition 'relative to (*pros*)'; for great is spoken of as relative to small, not as great *of* small.

Since reciprocity occurs in many ways, we must find that which is particular to the subject in hand. For there is also reciprocity (conversion) in a syllogism when the conclusion is converted and one of the premisses remains the same, then the other premiss is necessarily converted. For if, as Aristotle says in the second book of the *Prior Analytics*:[131] 'let it be taken as proved, by means of the middle term B, that A is stated of [all] C'; but let A be taken as applying to none, or not to all, of C by conversion either to the contrary or to the opposite; and let this be taken as one premiss, with the other of the two premisses remaining constant, whatever it is; then the remaining premiss is converted by the same conversion and becomes a conclusion. For if A is taken as applying to all B, and B to all C, the conclusion is drawn that A applies to all C. But if this is converted and becomes a premiss stating that A applies to none [or not all][132] of C, and if of the original premisses the major, stating that A applies to all B, is taken as a minor premiss, then in the second figure it is concluded that B applies to none, or not all, of C. But if the minor premiss remains the particular conclusion is necessarily drawn in the third figure, that A does not apply to all B.

There is also a conversion of a premiss which occurs according to an interchange of the terms where both [propositions] are true or false together: 'no man is a stone; no stone is a man: every man is an animal; some animal is a man'. 181,1

There is correspondence (*antakolouthia*) also among entities through the fact that different things can co-exist (*sunuparkhein*),[133] for example the pious co-exists with the good, and *vice versa*.

There is another correspondence besides these, that to do with relatives, which has not only correspondence, but also [occurs] with the relationship of what is reciprocally predicated (*antikatêgoroumena*). For that A is of B, and B of A, is not the same thing as having this feature together with relationship. It is one thing to say 'the good man is pious, and the pious man is good' and another to say 'the slave is the slave of a master, and the master is master of a slave'[134] – the latter is [said] in terms of relationship, the former of participation. Of things which reciprocate (*antistrephein*) using the same case ending some use the same term for both, e.g. equal and similar; for the equal is equal to the equal, and the similar is similar to the similar – where that which has the relationship and that to which it has it are the same. But in other cases there is a variation, as with master and slave, double and half, as Archytas thinks when he says: 'things such as equal and brother admit a similar reciprocity; others such as greater and smaller admit a dissimilar one.' From the simple expressions some of the compound relatives would be engendered according

to their participation in other categories, such as 'of like age' (by participation in When), and 'equally matched' (by participation in Passivity), and 'of like speed' (by participation in Activity) when the speed is viewed in terms of the impetus of bodies, and so on.

But perhaps reciprocity is not a feature particular to relatives; one might find that a problem, since it is found not only in them but in many other things as well. For if something is honourable, then it is beneficial, and if it is beneficial, it is honourable. People take note of this problem; some object to the example as suiting the Stoics more than the Peripatetics, who say that the honourable is that which is to be chosen *per se*, and the beneficial to be chosen according to nature; that is why, if a thing is honourable, they claim it is *ipso facto* beneficial, but not *vice versa*. At all events they say that health, [being] according to nature, is beneficial and useful, but not honourable since it is not to be chosen *per se* as the soundness of an organ.

Others reject this objection as not being relevant to the problem but merely directed against the example.[135] For even if one agrees, in the case of this example, that the correspondence was unsound, there are many other things that co-exist, some as substances like the centre and surface of a sphere, others as posteriors and priors, as light co-exists with the sun, others as inseparable accidents, as heat is of fire and as the definitions co-exist with, and correspond to, the general character (*to kephalaiôdes*). But those who make this criticism do not themselves resolve the problem, but yield to it by saying that to correlate is not strictly a distinctive feature of relatives, found in them all and in them alone, but in all but not in them alone (for there are other things, they say, that correlate in that they correspond to, and co-exist with, each other); but it is said to be, if anything, a particular feature because of common speech, which requires us to name as particular features those which are found in all items, even if not in them alone.

So perhaps we should pay closer attention to what was said. For [Aristotle] did not say that relatives co-exist with each other (like light and the sun) heat and fire) nor that the one is just what the other is (like the beautiful and the good), but that the things that are said to be relative to [other] things are those which are spoken of as in themselves relative to what are [what they are] in themselves.[136] For to refer to something else and to be spoken of in relation to something else is the actual form of the Relative. But for that thing (B), in relation to which it (A) is spoken of, to be spoken of in a corresponding manner in relation to that which (A) is spoken of in relation to it (B), that is the distinctive concomitant of relatives.[137] For in general the other co-existing aspects are not spoken of in terms of each other. For even if the light is that of the sun, it is not spoken of in relation to the sun; for it is one thing to be the product, activity, affection or

possession of something, another to be and to be spoken of as relative to something. For the former, even if they are of something else, even so have their own particular nature; but that which is relative is invested with its being in its reference towards something else, and these depend on each other in a corresponding manner, and not the one on the other as in the case of priors and posteriors. For they are spoken of in relation to their reciprocating correlates just because they exist from and in each other; for just as they exist, so they are spoken of.

We should realise too that the reciprocity of relatives does not only occur in being spoken of. For this indicates some common feature and some particular usage of words, while the fact that relationship exists as a result of what is shared produces the category of what the Relative.[138]

Archytas presents the reciprocity of relatives as follows: '[Aristotle] admits', he says, 'the reciprocity, of likes such as equal and brother, and of unlikes such as greater and smaller'. He [Archytas] himself[139] admits the [singular] correlative too when he says the following about the species of relatives: 'one of them [is, and one][140] is not, reciprocating, for example knowledge and perception; for knowledge is said to be of the knowable, and perception of the perceptible; but the knowable is not said to be *of* knowledge nor the perceptible *of* perception. The reason is that the knowable and the perceptible can exist without knowledge or perception, but knowledge and perception cannot exist without the knowable and the perceptible.'

This same man characterises relatives rather in terms of their *being* relative to each other and together with each other, saying: 'The particular feature of things relatively disposed is that they co-exist with each other and are the cause of each other.' For because of their co-existence in terms of cause and being there follows also that of being spoken of. For just as anything exists, so it is spoken of, and because it exists it is spoken of; but it does not exist because it is spoken of; and in so far as such-and-such a thing exists, it produces the particular feature of the genus; but in so far as it is merely spoken of, no one will be able to show its generic distinction. Consequently the reciprocity in terms of being spoken of depends on the co-existence in terms of being.

How they co-exist with each other and are simultaneous by nature, although some appear to be prior in terms of cause (as the activity is prior to the affection, and the father to the son), we shall learn when we follow [Aristotle] when he says that things that are [cor]relative are simultaneous by nature.

6b36-7b14 In fact sometimes they will appear not to reciprocate [if one of the correlates is not presented correctly in relation to its correlate and there is a mistake in the presentation; for example if wing is given as 'of bird', then 'bird of wing' does not reciprocate, since the initial correlation 'wing of bird' was incorrect, since it is not *qua* bird but *qua* winged that the wing is said to be of it. For wings belong to many other creatures that are not birds. So if the presentation is correctly made there is a reciprocity; for example the wing is the wing of what is winged, and the winged is winged because of the wing.

It may perhaps sometimes be necessary to coin words if there is no existing term to express the reciprocity correctly; for example if rudder is given 'of vessel' the reciprocity is incorrect, since it is not *qua* vessel that the rudder is said to be of it; for there are vessels that do not have rudders; so there is no reciprocity, since the vessel is not said to be the vessel of a rudder. Perhaps the presentation would be more correct if the rudder were in some way said to be the rudder of 'the ruddered' or some such word, since there is no existing term; then there is a reciprocity, provided the presentation is correct: the ruddered is ruddered because of the rudder. This is true in the other instances too; for example the head would more correctly be given as 'of the headed' than 'of the living creatures', since it is not *qua* living creature that it has a head, since there are many living creatures that have no head. In this way, I imagine, we can most easily form a conception of what has no existing verbal expression, if we use the names of the original items to create new ones for their reciprocating correlates, just as above we created 'winged' from 'wing' and 'ruddered' from 'rudder'.

Therefore all things that are relative to something are spoken of in relation to their reciprocating correlates, if they are correctly presented. There is no correlation if they are presented relative to any random thing and not to its proper correlate. I mean that even in the case of things that we all agree can be spoken of in relation to reciprocating correlates, and where names exist for them, there is no reciprocity if the presentation is made in relation to some accident and not to the proper correlate; for example if 'slave' is presented not as 'of master' but 'of man' or 'of biped' or anything like that, there is no reciprocity, since the presentation is incorrect.

Furthermore if that in relation to which something is spoken of is properly presented, when all the other accidents are stripped away and only the thing itself is left in relation to which it was properly stated, it will always be spoken of in relation to

> that. For example if slave is spoken of in relation to master, when all the accidents of the master are stripped away – such as 'being a biped' or 'receptive of knowledge' or 'a man' – and only 'being a master' is left, the slave will always be spoken of in relation to that. For the slave is said to be the slave of a master. But if that to which something is said to be relative is incorrectly presented, when all else is stripped away and only that to which it was presented as being relative is left, then it will not be spoken of in relation to that. Let us imagine that slave is presented as 'of a man', and wing as 'of a bird', and let us imagine that 'being a master' is stripped away from the man; now the slave will no longer be spoken of in relation to a man, since if there is no master there is no slave; similarly let us strip away 'being winged' from the bird; now the wing will no longer belong among relatives, since if there is nothing winged there will not be anything for there to be a wing of. Consequently we must present on each occasion the correct correlate. The presentation is easy if the word already exists; if not we may have to coin one. When correlates are so presented] it is clear that all relatives will be said to be relative to reciprocating correlates.

He has said that all relatives are spoken of in relation to reciprocating correlatives. Since some appear not to correlate reciprocally,[141] as the phrase 'wing of bird' does not correlate reciprocally to the bird (for we do not say 'the bird is the bird of a wing' or '[the bird is] the bird by a wing'; for there are other winged creatures which are not birds; for some winged creatures are flesh-winged, others sheath-winged, others feather-winged, of which only the last are birds), he wishes in what he says next to give the reason for the fact that some things appear not to reciprocate although all [relatives] do reciprocate, and at the same time to explain the [various] modes of their presentation; of these the ones that are correct preserve the reciprocity, but the others that are incorrect do not. The reason for the fact that sometimes they appear not to reciprocate is that '[one of the correlates] is not presented correctly in relation to its correlate'. Modes of correct presentation are to make the presentation relative to what is spoken of as the natural correlate, and to apply the correlation co-extensively.[142] For such things follow from, and correlate reciprocally to, each other. Modes of incorrect presentation are when the presentation is made relative to something that is not spoken of as the natural correlate, and when the items presented are wider or narrower and not co-extensive. An example of a correct mode of presentation was a slave in relation to a master; for these are co-extensive and are presented *per se*; for *qua* slave he is [slave] of a master, and *qua* master he is [master] of a slave, and for this reason they are reciprocally predi-

cated of each other in the same way. He says that an example of a wrong mode is if the wing is presented as that of a bird; for the bird is not the only winged creature and there is no co-extension; for there are many other winged creatures, as stated, and for this reason there is no reciprocity. For we do not say 'the bird is the bird of a wing' or '[the bird is] a bird by a wing' because the wing of a bird is the wrong way of presenting it from the outset; for the wing is spoken of with wider extension than that of a bird, because there are many other winged creatures, and only those with feathered wings are birds. Therefore wing is wider and quite reasonably does not reciprocate; the reason is that at the outset the phrase 'the wing of a bird' was not properly presented. That is why [Aristotle] says: 'sometimes they will not appear to reciprocate'. He was wise to say 'they will not appear', since on account of the mistaken presentation of the names it happens that there does not appear to be any reciprocity. So he wants to say how the presentation should have been made when he cannot find a term available which is co-extensive with 'wing'; therefore he is compelled to make up a term, saying that we must make a presentation like 'the wing of the winged creature', since it is because these are co-extensive that the reciprocity is consistent, when we say 'the winged creature is winged by a wing'. In doing so he introduced a way in which we can understand things that are co-extensive and correspond: namely, we must create names for whatever is said to be relative to them on the basis of the first terms which are known through common speech (for example, on the basis of 'wing' [we call something] 'winged', and on the basis of 'rudder' [we call something] 'ruddered'). In this way the named item is neither wider nor narrower but commensurate.

We should note his words: 'for the wing is not said to be of a bird *qua* bird'. He spoke in this way because '*qua*' must be predicated not only as giving a thing's substance; it also means being co-extensive in this way. But if this is so, the genera are not predicated of the species *qua* themselves (for they are not said of them co-extensively), but nor is '*qua* itself' equivalent to '*per se*'. For what is *per se* is spoken of in the case of things considered according to their substance, but what is *qua* itself is spoken of in the case of what is co-extensive. But if it is not a bird unless it has wings, why will it not be called a bird *qua* bird by a wing? For in the case of a vessel it was correct to say 'it is not *qua* vessel that the rudder is said to be of it', because there are some vessels that do not have a rudder, for example small boats that are propelled and steered at the same time by means of the oars, and certain river ferries, some of which are punted with poles and others pulled by cables. So the rudder is correctly said to be of the vessel not *qua* vessel; but this is not correct in the case of a bird, since all birds have wings. Consequently the words 'not *qua* bird' are not spoken for that reason; but because they are not co-extensive, for this reason it

is true to say 'not *qua* bird'; for other creatures too have wings. But the wing is co-extensive with the winged, and for this reason it was necessary to present it in this way.[143]

[Aristotle] says: 'it may perhaps sometimes be necessary to coin words' not because we should impose needless innovations on the everyday terminology of existing words (the 'sometimes' and 'may perhaps' and 'necessary' reveal his caution), but because when there is no existing word for a reciprocating correlate, then we must make up a word relative to which the reciprocity can be properly stated; we should not make up the word purely with a view to expediency, but in order to demonstrate the reciprocating correlate in view of the actual items.

He next proceeds to the example of the vessel and the rudder, where conversely it was not the item contained that was wider (as the wing is wider than the bird), but the container; for 'vessel' exceeds 'rudder', just as in the other example 'wing' is wider than 'bird'. Therefore he was correct in saying 'the rudder is said of the vessel not *qua* vessel', but in so far as it does not belong to it in an essential[144] manner and in so far as it is not co-extensive. But [to say] 'the rudder is of the vessel not *qua* rudder' would be wrong; for it is not possible for there to be a rudder which is not of a vessel. If then 'vessel' is wider than 'rudder' it was quite reasonable to say there was no reciprocity; but if 'ruddered' is used, then the usage is proper (for it is, *qua* rudder, of something ruddered, and *qua* ruddered it is such by a rudder), and they are co-extensive with each other, and for that reason they quite reasonably [are said to] reciprocate.

The third example he gives is of animal and head. In this case too, just as in that of the vessel and the rudder, 'animal' is wider than 'head'; 'for there are many animals that have no head' like the jelly-fish in the sea, and shell-fish and all bi-valves, as well as crabs. So again [he would say] 'it has a head not *qua* animal' according to the same mode that we shall observe in the case of the vessel and the rudder, because it is neither part of its substance nor co-extensive. For [we say] 'it has wings not *qua* bird', not because it is non-essential,[145] but only because it is not co-extensive; for the wings belong to the bird according to its substance. It is clear, then, from all this that this is said when the presentation is made properly in relation to the reciprocity. But if it is not properly presented, there will be no reciprocity even in the case of things which by common agreement are spoken of in relation to reciprocating correlates and having existing names; for when the thing itself in relation to which it is spoken of is not properly stated, but one of its accidents [is spoken of], (e.g. if we do not say 'master', but 'man' or 'biped', even if it is true to say 'the slave is the slave of a man') there is no reciprocity; for the man is not the man of a slave, nor is the biped [the biped of a slave], because the mode of predication was not in the first place a proper one, but *per accidens*.[146]

[Aristotle] gives as the yardstick for the proper mode of presenta-

186,1 tion: 'for if that in relation to which [something] is spoken of is properly presented, when all the other accidents are stripped away and only the thing itself is left in relation to which it was properly stated, it will always be spoken of in relation to that', as in the case of the master and the slave. For if all the other properties are removed 5 from the master, the slave will be spoken of in relation to the master, because the presentation was made properly. But if the presentation is not made properly and the slave is spoken of [as being] of a man, when all the other properties are stripped from the man, the master too is stripped away, and the slave will no longer be spoken of in relation to the man, nor will he be relative to anything at all. For if there is no master, there is no slave; or even if there were,[147] he would 10 not be relative to anything. Similarly if the wing is presented as relative to the bird, when everything is stripped away from the bird and 'winged' [is stripped away] too, the wing will no longer be relative to anything; for if there is nothing winged, there is no wing; or even if there were, it would be relative to nothing. But if the bird is removed, there is still a wing and this can be related to a winged creature, e.g. a wasp. For there are wings on wasps and other things.

15 We must see that he offered two examples of improper presentations having as a common feature that they are used in terms of something other, but as a particular feature in the one case that the example of master and slave reveals the presentation inappropriately made in relation to accidents, while that of the bird and the wing is to do with substances, but is inappropriate in terms of being wider or 20 narrower. So much by way of clarification of terms.

Some of his opponents straightaway disparage the terms 'headed', 'ruddered' and 'winged'. We should disregard them, but since it happens that the more philosophical of the commentators who disparaged them have stirred up a swarm of many good arguments, for that reason I shall briefly review the counter-arguments.

25 First they are unaware that he did not use these terms, but as far as the example goes he indicated what they would have been if words had been established for the things envisaged by him. Secondly the fact that he gave the appropriate name to the thing when discovered which the wordgiver[148] himself would have given if he had had a concept of the thing – that would be worth approval, not mockery. In 30 addition he applied the word-coining not to strange terms, but deviating a little from those established in everyday speech he used the commonplace terms but not in a commonplace way, e.g. 'ruddered' from 'rudder'. In this way he was anxious on each occasion to preserve everyday speech. For the surest mode of word-coining is that based on already existing words and the prevailing everyday speech. For 35 the first wordgivers clearly put together new words from everyday and simpler ones, as the etymologies show;[149] yet the person who does

this makes few innovations in the language, preserving the everyday 187,1
concept about things. Furthermore wordgiving is appropriate in every science. For, in fact, the geometrician and the musician who are concerned with things unknown to most people are compelled to produce names particular to those things and unfamiliar to most people. They do this in two ways; either themselves using already 5
existing terms for other things, as the musician talks about 'colour' and 'interval', and the geometrician about the 'centre';[150] or else inventing terms that do not exist beforehand. If words are by convention, then we must aim at the goal of the convention; but if they are by nature, then we must observe nature by attaching the appropriate sounds to the appropriate things.[151]

Eudorus the Academic objects that wing is not coordinate with 10
winged;[152] for the wing is spoken of in actuality, and the winged in potentiality, as having the potential for wings, and if it were in actuality it would be spoken of not as winged (*pterôton*), but possessed of wings (*epterômenon*). He makes a similar distinction in the case of the rudder – that it should be spoken of in relation not to the ruddered, but to that which possesses a rudder, and the head to that which possesses a head. But in finding this problematic he does not realise 15
that each of these is spoken of in two ways, both in potentiality and actuality, just as 'woven' and 'worn' are said both of the cloak that already exists and of the one that has the potential to be made. In the case of things that do not exist, in practice the wordgiver could use arbitrary terms even more widely. But, say the commentators, we must observe that perhaps even to begin with the problem misleads us; for if the primary imposition (*prôtê thesis*)[153] of 'winged' is coordi- 20
nate with 'wing', and that of 'ruddered' to 'rudder', and if the former are paronymously named after the latter, why should they not be yoked together in a similar manner, since their primary composition (*prôtê sustasis*) had the common and joint feature?

Others say that the distinction made in such a presentation is absurd. For however the wing, the rudder and the head are presented, 25
they are not presented as they should be. For they do not at all belong among relatives, because each of them is part of a substance and a substance, and no substance belongs among relatives, as Aristotle himself thinks.[154] Now Athenodorus thinks that according to Aristotle relation occurs where the appellation requires in addition the item relative to which it is spoken (for the person hearing the word 'slave' 30
requires in addition [to know] of whom or what he is the slave); Cornutus says that relatives are those things which are characterised by a relationship, but not a syntactical one, as is the case with what has and what is had, but rather a relationship concerning substance, as is the case when the item, by being what it is, refers to something else. In neither mode is the rudder or the wing relative to something;

for neither requires anything in addition in relation to which it is spoken of, nor is either spoken of in terms of essential (*hupostatikos*) relationship to something else. For rudder, head and wing are all substances.[155] And we should take not only the conception which is coordinate and in terms of deficiency, but also that in terms of constitution. For in this way the part has a relationship to the whole of which it is a part, just in that it is a part. Boethus was right to agree that the hand and the head are among relatives in so far as they are parts, but, of course, not in so far as they are head [and hand] and just what a head or hand is – in this respect they are substances. So now the relative aspect of them should be considered as that of parts to wholes, and there is no impossible consequence.

Some people, making a defence against the stated problem, say that Aristotle does not say that the rudder or the wing is necessarily relative to something, as far as regards the classification established in the *Categories*, but makes them examples to explain being wider and narrower, as if he had introduced the animal to show how we must introduce [the idea of] things being co-extensive into reciprocity. But those who claim this seem to forget that Aristotle added[156] 'so the wing is not among relatives' as if taking the argument to absurdity. Yet if he had wanted it not to be relative to something, why did he propose the converse as absurd?

Apollonius of Alexandria[157] says that the presentation of the two examples is phrased incongruously, because on the one occasion [Aristotle] says 'it has wings not *qua* bird, for many things other than birds have wings',[158] and on the other he says 'it has a head not *qua* animal; for many animals have no head',[159] when he should have said 'for many things other than animals have heads', just as in the other example he says 'for many things other than birds have wings'. It would be sufficient to say that [Aristotle] offered both examples [as examples] of excess and deficiency and the consequent denial of correlation; in the one example 'wing' exceeds 'bird', i.e. what is had [exceeds] what has it, and in the other example conversely the haver [exceeds] what is had, as 'animal' exceeds 'head'. For to say that just as 'wing' exceeds 'bird', so head [exceeds] 'animal' (because garlic plants and palm trees have heads) is typical of people who employ homonymous and metaphorical language extensively. One should take things that correlate to something in the strict sense and not using homonymous and metaphorical language. If they are so taken, 'animal' will exceed 'head', and as a result non-reciprocation is demonstrated, just as it was in the other pair based on 'wing'.

Ariston adds the following problem to those already stated: 'if everything relative to something is spoken of in relation to something which is separate from it, as father is relative to son, and if the world

order (*kosmos*)[160] has nothing separate from itself (for there is nothing outside the world order), then the world order will not be relative to something. Yet it is among relatives; for just as the wing is the wing of something winged, so too that which is in order is of the ordered, and what is in earth is of the earthy, and what is in air is of the airy.'[161] In reply to this it must be said that at the outset the words 'everything relative to something is spoken of in relation to something else separate from it' were wrongly understood; for the whole and the part, which are among relatives, are not spoken of in relation to things separate from each other. The world order, then, as a substance and being just what it is, is not relative to something, but as a whole and an ordering of its parts it is spoken of in relation to its parts, and its parts in relation to the whole. If the world order is spoken of as the product of the orderer, it will also be separate in existence; if it is not separated in existence, it is however separated in thought. But perhaps 'ordered' was wrongly understood. For if the whole is that which is ordered, the order is no longer the whole but is what is in the whole, just as the wing is in the winged. Yet it was in puzzlement that [Ariston] spoke of that which is in the world order [as being] of what is ordered, as the wing is of the bird. But if that which is in the world order is the part which is ordered, then the whole is in the part within itself, just as the wing is within the winged. It is even more absurd in the case of the earth and the earthy. For if the earth is the whole and is in the earthy, then the whole will be within the part, just as the wing is within the winged.

But although Archytas speaks no less precisely than Aristotle, why did he omit this particular feature of relatives, i.e. being spoken of in relation to correlates? The answer is that he posited them as co-existent and causes of each other, and admitted their essential reciprocity but disregarded that in terms of [the form of] words and being spoken of; or else he passed over the latter as drawing the former along with it.

7b15-8a12 Relatives seem to be simultaneous by nature. [This is true in most cases; for double and half are simultaneous – when there is a half there is a double, and when there is a slave there is a master. This is true of the other instances too. Moreover they remove each other too, for if there is no double there is no half, and if there is no half there is no double. This is true in the other instances of this kind. But being simultaneous by nature does not seem to hold good for all things that are relative to something; for the knowable would appear to be prior to the knowledge of it; for the most part we acquire knowledge

of what pre-exists; for in few cases, or in no case, would you find knowledge coming into being at the same time as its object. Furthermore when the knowable is removed it removes with it the knowledge, but the knowledge [when removed] does not remove the knowable with it. For if there is no object of knowledge there can be no knowledge of it (for there will no longer be anything for it to be the knowledge of); but even if there is no knowledge that does not mean that there can be no object of knowledge. Take the squaring of the circle: if it is knowable, the knowledge of it does not yet exist, but it is still an object of knowledge. Furthermore when animal is removed, knowledge is removed; but it is possible for there still to be many knowables.

It is much the same with perception. The perceptible seems to be prior to the perception of it. For when the perceptible is removed, it removes with it the perception, but the perception [when removed] does not remove the perceptible with it. For perceptions are to do with the body and are in the body, and when the perceptible is removed the body too is removed (for the body belongs among perceptibles) and if there is no body perception too is removed; consequently the perceptible [when removed] removes with it perception. But when perception is, the perceptible is not removed with it; for if the living creature is removed, perception is removed; but the perceptible will still exist – for example body, heat, sweetness, bitterness and all other perceptibles. Furthermore perception is simultaneous with what perceives (the living creature and perception come into being at the same time) but the perceptible pre-exists even perception, since fire, water and suchlike (from which the living creature is composed) pre-exist the living creature or perception.] Consequently the perceptible is prior to perception.

[Aristotle] now presents what is the most distinctive feature of relatives, their being simultaneous by nature.[162] For to conduct the pursuit of the knowable by means of particular features is more appropriate for a full understanding, and this is even necessary in the case of primary genera, since in this way alone is it possible to consider each of them *per se*.[163] In this way too Archytas presented as the distinctive feature of relatives 'being simultaneously co-existent with each other and being causes of each other; for if there is double, there must of necessity be half, and if there is half, there must of necessity be double; and the double is the cause of there being the half, and the half of there being the double'. Aristotle too says that relatives seem to be simultaneous by nature, adding 'seem' either on

account of his uncertainty on this point, or else because this was the opinion of philosophers in the past also. For Archytas, as stated, proposed this as the particular feature of relatives, and Plato is clearly in agreement with him.[164] Or else because there is some distinction, about when and how what is being said can be true. He 190,1 added 'by nature' to 'simultaneous' since simultaneous is spoken of in many senses, as he himself will demonstrate as he proceeds, and one of the meanings is 'simultaneous by nature'. This is shown by the fact that they are united by nature, that they are causes of each other, that they depend on each other, and that they bring each other along and remove each other together. For the son exists when the father exists, and *vice versa*; and when the one ceases to exist, so does the other.

Having said this he gives it credibility by means of induction, by proceeding to each of the relatives which co-exist unambiguously. He conducts his proof on three fronts: (a) from their co-existing, which he demonstrates by saying that 'double and half exist simultaneously'; (b) from their bringing and being brought along, which he demonstrates by saying that 'when half exists, double exists'; and (c) from their removing and being removed together – for he says 'if the double does not exist, neither does the half, and *vice versa*'. Co-existing has two senses: (a) to co-exist substantially is one thing, as light co-exists with the sun;[165] (b) to co-exist in terms of relationship, which does not always have essential reality equally;[166] for when the son dies, the father loses his relational co-existence, since neither the son nor the father exist when the son is no more; for even if he is called a father after the death of his son, he is so-called by reference to the time when [the son] was alive. But he does not lose his own substantial existence. Consequently relational co-existence and co-removal happens in the case of relatives, but we should not take this as substantial [existence and removal]. For as long as relatives enjoy existence, they also enjoy co-existence; but this consists in relationship. If co-existence were to be taken in this sense, it would be indisputable; for relationship does not exist in an item which is single, but it is always of one thing in relation to something else. Therefore both items must co-exist in such a co-existence if the relationship is to be preserved in them. For if only one of them endures, there will be no relationship. Aristotle made this convincing admirably by means of induction; for he demonstrates the highest genera by means of what is below them and what is more divisible than them. For it is not possible to produce a proof by syllogism by taking anything more general than them; but we should approach from what is posterior and more partial as from what is evident and credible in itself.

But since we ought to review the opposing arguments, even if they are false, in order that, when they are refuted by the arguments of

people of understanding, they should not deceive those whose understanding is superficial, he offers a plausible rebuttal of the stated criticism. For he says,[167] 'that relatives are simultaneous by nature does not seem to be true in every case'; for the perceptible and the knowable seem to be prior, the former to perception, the latter to knowledge. He shows this first from what is evident, saying 'for the most part we acquire knowledge of what pre-exists'. For we approach what is already in existence, and when we were mere infants, the knowable, having been created before us, existed even then, while our knowledge of it did not yet exist; the knowledge of the eclipse came later, via Thales, to the Greeks, while the eclipse itself and its knowability pre-existed.[168] This is the more evident [argument]. But what are the few things where the knowledge is simultaneous with the knowable? Intelligible entities, which are without matter, exist simultaneously with the knowledge which always exists in actuality,[169] whether there is some such knowledge in us, always remaining above (as Plotinus[170] and Iamblichus[171] think), or whether it is in the actualised intellect – if anyone chooses to call that intellection knowledge. It is also possible to call it [knowledge] because of the abstract existence of universals; for knowledge of them is simultaneous with their existence. It is true also in the case of figments – both those in the imagination and those of artists; for the chimaera and knowledge of the chimaera are simultaneous.

Why, then, did he add 'or in no case'? Either because some people tried to remove generalisations, intelligibles and anything conceived in any way at all, or else because even if these things exist in nature, we acquire our concepts of them later, and for that reason it happens that in their case too the knowable pre-exists the knowledge. So in this way, then, according to the earlier proof he seems to have shown that the knowable is prior to the knowledge and not simultaneous by nature.

According to the second point of view prior is spoken of in many senses, as he himself will explain later;[172] he now uses it in one sense, in so far as what is prior by nature removes [the posterior with itself] but is not removed [when the posterior is removed]; for if there is no unit there is no dyad, and if there is no animal there is no man – but if the dyad is removed the unit is not thereby removed; for the unit, which exists *per se*, does not have its being in the dyad; but things which are second by nature have their being not in the fact that they remove [their priors with themselves], but because of the very fact of their posteriority;[173] for what is second implies[174] what is first, but is not implied by it; for if there is a dyad, there must of necessity be a unit, and if there is man, there must of necessity be an animal; but if there is a unit there is no necessity for there to be a dyad, and if there is an animal there is no necessity for there to be a man. In the same

way if there is an accident there is of necessity a substance, but if there is a substance there is no necessity for there to be an accident, because the substance is something prior to, and simpler than, the accident. He applies this rule, then, to the knowable and knowledge, and says that 'when the knowable is removed, it removes with it the knowledge, but the knowledge [when removed] does not remove the knowable with it'; consequently knowledge and the knowable are not simultaneous by nature, since what removes without being removed is prior by nature. The same argument is applied in the case of perception and the perceptible. Therefore if these are among relatives, not all relatives are simultaneous by nature: *quod erat demonstrandum*, as the geometrician would say. 192,1

But it seems obvious that 'the knowable removes the knowledge with itself, but the knowledge does not remove the knowable with itself'; for when the knowable is removed, there will be nothing for the knowledge to be of, so that it simply will not exist; but when the knowledge is removed, the knowable endures; for even if through idleness we at some time lose our cognition of realities, the realities, i.e. the knowables, nevertheless endure; for in fact even in music we heard the quarter-tone to begin with, but are nowadays unaware of this interval. He demonstrates this in the case of squaring the circle (*tetragônismos*);[175] for since this had not yet been discovered, he speaks circumspectly, saying 'if it is knowable, the knowledge of it does not yet exist, but it is an object of knowledge'. The squaring of the circle occurs when we draw a square equal to a given circle. Aristotle, as it seems, did not yet know how to do it, but Iamblichus says it had been discovered by the Pythagoreans; 'It is clear', Iamblichus observes, 'from the proofs of the Pythagorean Sextus, who inherited the method of proof from his predecessors; later Archimedes [solved the problem] by means of the spiral line,[176] Nicomedes by means of the line specially called "quadratrix", Apollonius by means of a line which he himself calls "the sister of the conchoid" but which is the same as that of Nicomedes, and Carpus by means of a line he names simply "the line from double movement"; many others too have tackled the problem elegantly.' Such is Iamblichus' account. It is surprising that this escaped the notice of the learned Porphyry, who writes:[177] 'it seems that there is a proof, in so far as it is possible to match a square, like other figures, with a circle – but it has not yet been achieved or discovered. Some people since Aristotle's time, however, claim to have discovered it.' So perhaps there was some way of solving the problem which relied on instruments (*organikê*) rather than proof.

Furthermore [Aristotle] shows by means of another example that when knowledge is removed it does not remove the knowable with itself; for he says: 'when animal is removed', either hypothetically, or

in reference to the Stoic conflagration,[178] 'knowledge is removed'
193,1 (since knowledge is in the soul, and the soul is in the animal) 'but it is possible for there to be many knowables' such as the simple elements and anything else that exists other than animals.

According to the same method of argument he shows that the perceptible is prior to perception, since [the perceptible] removes
5 [perception] with itself, but not *vice versa*. For if body is one of the perceptibles, when the perceptible is removed, body is removed; and when body is removed, perception is removed. 'For perceptions', he says, 'are to do with body and are in body'[179] (for perceptions are bodily cognitions) 'but when perception is removed the perceptible is not removed with it'. Again, acccording to the proposition, when animal is removed, perception too is removed (for perception is particular to
10 the animal and [happens] in the animal), but the simple bodies, of which the animal is composed, are not prevented from being perceptible. Next, just as in the case of knowledge and the knowable it was shown that the knowable is prior *per se* and not only from the fact that it removes without being removed, so too in the case of the perceptible and perception. For 'perception is simultaneous with what
15 perceives', i.e. the animal, but the perceptible pre-exists just as the simple bodies from which the animal is composed pre-exist by nature, before what perceives comes-to-be.

In the case of knowledge and the knowable he showed first that they do not co-exist, and secondly that they do not remove each other, while in the case of perception he showed in reverse order first that they do not remove each other, and secondly that they do not co-exist;
20 the commentators did not read [the text] without examining this difference, but say that the reason for the reversal of order is his wish to base his proofs on what is more cognisable and more evident. In the case of the contrast between knowledge and the knowable the pre-existence was more cognisable, because whoever gains knowledge, even if he is getting on in years,[180] [finds it] desirable; but in
25 terms of the other contrast, removing and being removed were more in evidence. For at the moment of birth we have perception, and in this respect the pre-existence of the perceptible is not evident, as is the case with the knowable;[181] but it is more in evidence that perception, being bodily cognition, is removed together with the perceptible – in which the body resides – while the perceptible, which is viewed in terms of the simpler elements from which the animal is composed,
30 is not removed with the perception, which is a cognition in the animal, which is a compound. So this was said, apparently showing that it is not true in every case that relatives are simultaneous by nature.

Yet we ought to realise that he is not satisfied with these proofs, since he immediately added the verb 'seem'. The obvious reply to the
194,1 objection in general would be that, if there is no knowledge or

perception, the subjects of cognition for those who can know or perceive them are not prevented from existing, but they are not knowable, perceptible or cognisable *tout court*.[182] But [Aristotle] himself sets this out better and more systematically in the *Metaphysics*,[183] where he says that the actualised perceptibles are perceived by actualised senses; potential ones by potential senses. But the resolution of the problem stated there is more complete and relies on the distinction between [different] potentials;[184] but he now postpones it on the grounds that he is writing an introductory exposition. He nevertheless presents the problems because, at one and the same time, his spirit of enquiry leaves no question uninvestigated and he thinks it useful to exercise the minds of his readers in anticipation and to prepare them.

But we should realise that in general one of the relatives can never exist unless the other does too. For the eclipse of the moon did exist even before Thales, but it was not known to the Greeks before Thales. But if it was known to any non-Greeks, then they had knowledge of it so that either both or neither must exist.[185] It seems that Aristotle said this and what follows to answer the criticism of his definition of relatives because he wished to correct it by pointing out that even if one says that such things are not relative to something, i.e. things for which to be is to be relatively disposed to something, neither their co-existence nor the single nature of relatives is a necessity.

But it is possible to object to these aporetic proofs. For if the animal is removed, neither knowledge nor perception is removed at all. For even if in men there is no knowledge of anything, even so there is knowledge in the unmoved cause,[186] and even if there is no perception in the particular animal, even so there is perception of the universally perceptible present universally in the life of the cosmos. But not even this is true, that even if there is no perception, the perceptible exists; for it does not: let there be honey and snow; but the honey may not be tastable or the snow visible; consequently nothing else will exist as a perceptible without perception.[187]

But Aristotle, in face of the fact[188] that co-existence is not a particular feature of relatives, added the statement that it is not present in all relatives; but others agree that it is present not only in all relatives, but show that it is present not only in relatives, and on the basis of that establish that this is not a particular feature; 'For', they say, 'simultaneous existence is observed in all opposites. For 195,1 co-existence is a property of contraries; for white is the contrary of black; and if black does not exist, nor does its contrary, white; for all contrariety is always between one being and another; so that if one of [a pair of] contraries exists, the other too must of necessity exist. Also having and privation[189] co-exist in a way. For having, by its

presence, produces having, and by its absence privation; the expression (*logos*) of the form is co-indicated (*sunemphainetai*) in both, in the one case by being participated in, in the other by not being participated in. Similarly, the privation co-indicates the removal of having, together with which it has its being, to be co-indicated. For it is a privation of having. It is clear that these[190] do not co-exist in the way that contraries do, since it is necessary that if the one exists, the other should not; yet in a way they cause each other to be co-indicated, and the argument called this co-existence.' 'But', they go on, 'affirmation and denial co-exist; for it is possible to deny, either rightly or wrongly, whatever someone affirms; for there is no difference in the definition. Therefore simultaneity is present in all pairs of opposites, and not only in relatives; consequently it is not a particular feature of things that are relative to something, since a particular feature is that which is present in all [of something] and in that alone.'

I think that in reply to this it should be said that neither privation and having nor affirmation and denial truly co-exist, but they are invested with being precisely in that they do not co-exist, since having is the presence of a form and privation its absence, and it is impossible for presence and absence to co-exist; and it is impossible for affirmation and denial to co-exist, since in every case there is bound to be *either* affirmation or *denial*, and it is in this way that each distinguishes truth and falsehood. But if, through their co-indicating each other in any way, they are thought to co-exist in that way, and things that do not co-exist have this non-co-existence as a sort of co-indication, nonetheless contraries, both being forms, are in addition equipollent, except that even in their case the co-existence is by way of their relationship and being relative to something. For they incline to each other by sharing in being relative to something. If any one were to press the case that state and privation, affirmation and denial, co-exist because the co-indicate each other, then these things too much have this co-indication by way of their sharing in some way in being relative to something.

They find other problems too, which apply to the so-called problem of potentials, which can be distinguished from this one. 'For', they say, 'how do we judge the perceptible and the knowable? Is it by aptitude (*epitêdeiotês*) alone, as Philo[191] says, even if there is no knowledge of it, and no likelihood of any, just as the piece of driftwood in the middle of the Atlantic is combustible in itself and according to its nature? Or must we then judge such things by unhindered aptitude, in so far as they are naturally suited to be subjects of knowledge or perception *per se* provided no evident hindrance prevents it? Or is it neither of these, and is the knowable spoken of when there is knowledge of it or when there is likely to be, and when the potential is likely to be judged by the outcome?' But the commentators now reject the judgement of

these matters on the grounds that it depends on a very difficult view of potentials, and they discuss Aristotle's statement here in terms of the philosophical school it fits and which it does not fit. For when Aristotle declares that even if knowledge does not exist the knowable does, and even if every animal is removed the perceptible is not removed with it, the judgement concerning potentials is transferred to mere aptitudes; but when it is said by some to be entirely unknowable unless there is some knowledge of it, it is then according to them that the potential is judged by the outcome. It is agreed that if the knowable does not exist then there is no knowledge; for it is from the knowable that any activity concerning it[192] comes-to-be; but that it is possible for the knowable to exist if knowledge does not, some agree by judging the potential only according to aptitude (for it has a nature appropriate for being known), while others who test by the outcome do not agree, unless it is undoubtedly going to reach an evident result. Consider how absurd is the position of those who on the one hand judge the potential in the way the ancients did, in terms of any sort of aptitude, as Philo did, but on the other hand now find it problematic according to the view of Diodorus[193] who judges the potential by the outcome, and who use the fact that the knowable exists when knowledge does not, as an objection against this view. For if, as the ancients said, that which has a starting point so as to be able to come-to-be is potential, then what Aristotle says would be true – that if knowledge does not exist in actuality, then the knowable exists potentially;[194] but this has no bearing on the co-existence of relatives; for one should compare what is potential with what is potential, and what is actual with what is actual, and in this way say that relatives are simultaneous. This property belongs to them because they are alongside each other and [come] from each other. It is quite reasonable to say, along with Archytas and Plato, according to Aristotle's more accurate classification, that they exist together and are removed together, and that the one does not exist without the other.

8a13-b24 There is a problem, whether no substance is said to be among relatives, [as would appear to be the case, or whether this is a possibility with some of the secondary substances. Certainly primary substances cannot be, since neither their wholes nor parts are spoken of in relation to anything. For the particular man is not called a particular man of something or someone, nor is the particular ox a particular ox of something or someone. So too with their parts; for the particular hand is not called the particular hand of something or someone (although it can be called the hand of someone), and the particular 197,1

head is not said to be a particular head of something or someone (although it can be called the head of someone). Similarly in the case of secondary substances, at least with most of them; for example man is not said to be a man of something or someone, nor is ox said to be an ox of someone or something, nor is wood said to be a [piece of] wood of someone or something (although we can talk about wood as someone's property). So in such cases it is clear that [primary] substances are not among relatives, although there is room for debate over some of the secondary substances; for example head is spoken of as the head of something, hand is spoken of as the hand of something, and so on; consequently these might seem to belong among relatives.

Therefore if an adequate definition of relatives was given it is either very difficult or quite impossible to come to the conclusion that no substance can be said to belong among relatives. But if it was inadequate, and if it is those things whose being is the same as being relatively disposed that are relatives, then there may be some solution. The earlier definition applies to all relatives, but even so 'being called just what they are of something else' is not what being relative to something means for these.

It is clear from this that if someone knows definitely one of the relatives, he will also know definitely that in relation to which it is spoken of. This is self-evident; for if someone knows that a particular item belongs among relatives, and if for relatives being is the same as being relatively disposed, then he also knows what it is relatively disposed to. For if he has no idea what it is relatively disposed to he will not even know whether it is related to something in a certain way. This is clear from particular cases: if you know definitely that some particular item is double, you know definitely *ipso facto* what it is the double of. For if you do not know it to be the double of anything definite, then you will have no idea even whether it is a double. Similarly if you know that a particular item is more beautiful, you are bound thereby to know definitely what it is more beautiful than; you will not know indeterminately that it is more beautiful than something inferior, since this is supposition, not knowledge; for you will still not know accurately that it is more beautiful than something inferior. And what if there happens to be nothing inferior to it? So it is clear that whatever relative you know definitely, you are bound to know definitely that in relation to which it is spoken of.

But it is possible to know definitely just what a head, hand or any such substance is, although it is not necessary to know what it is that they are said to be relative to. For it is not [always]

possible to know definitely whose head or hand this is so that these things would not be among relatives; if this [sort of substance] is not relative, then it would be true to say that no substance is among relatives. But perhaps it is difficult to make strong assertions without considering the question frequently; however, to have examined each of the problems is not unprofitable.

Since Substance has been defined as being *per se*, while Relatives have their being according to their reference (*aponeusis*) to something else, and since what is *per se* is opposed to what is relative to something else, it is clear that no substance could be a relative. For relatives are accidents, but a substance is not an accident. He quite reasonably, therefore, says that there is a problem: how is it that some substances seem to be found among relatives? For the hand, which is a substance, is said to be the hand *of* someone, and the foot is said to be the foot *of* someone, and what is said to be of someone [or something] seemed to be among relatives. So it is necessary either to deny that the parts of substances are substances (which is absurd, viz. that substance should be made up of non-substance, and is moreover inconsistent with what was said earlier, for Aristotle himself said that the parts of substances are substances) or else to correct the definition of relatives being offered which states that whatever is said to be *of* something else is relative. For the hand is said to be *of* the handed person, and the head *of* the headed person. But Aristotle himself, making the discussion more general, asks a question about all substance, viz. primary and secondary substance, and the parts in them: is it relative? He states clearly that primary and individual substance and its parts are not relative according to the definition; 'for the individual is not called a man of something'; but if he were relative, he would be spoken of in that way, just as 'on the right' is said to be on the right of left. If therefore for something to be relative is for it to be said to be just what it is *of* another thing,[195] then even the particular man would be spoken of as the particular man *of* someone; but if he is not spoken of in this way, then [Substance] is not a relative. So too with the individual part: 'for the particular hand is not called the particular hand *of* someone'. But it would need to be if Substance were relative, since individual items in the category [of Substance] differ from universals in this respect: that 'particular', i.e. being one in number, is applied to them. So when we predicate concerning individual substance, we say 'a particular man' and the predication becomes 'a particular man' of something.[196]

With secondary substances, in the case of wholes it is again evident that they are not relative; for man is not said to be man of something, nor is ox said to be ox *of* something, nor wood to be wood *of* something.

For they have substantial being *per se*. But if we were to say of man or ox that they are *of* someone as a possession, like a field, we are not presenting them in so far as they exist *per se* but in so far as they happen to be possessions.[197]

But it is worth stopping to ask why [Aristotle] did not say this also of the whole individual substance: for in that case he could have said that the individual man, or, for example, Daos, was *of* someone as the possession of his master. But perhaps, having discovered it was a distinctive feature that what does not have associated with it predication of the form 'something of something' is an individual, he made use of that.

Having shown, then, that neither primary substances – whole or part – nor whole secondary substances are spoken of as a relative, he says: 'in the case of some secondary substances', i.e. their parts, 'there is some disagreement'.[198] For just as the particular head is a part of the particular man, so too head, taken simply,[199] is part of man taken simply. But he has shown that the particular parts are not relative, because a particular head is not said to be of something; but in the case of universals he conceded that these seem to be relative, because each of them is said to be what it is 'of something else' (for they are parts of wholes); for it was not possible to say in their case what in the case of the particular substances prevented them from being relative.[200]

Having said this he realises that the definition offered of relatives needs some correction in order to resolve the problem. He says:[201] 'for if the definition was adequate, it is either difficult or impossible to show that no substance is relative.' For the parts of secondary substances are spoken of as of something, i.e. the whole, and for this reason they fall under the definition offered of relatives.[202] So that is why, in order that no substance should be found to be relative, he offers another definition of them, the one which says that 'relatives are those things whose being is the same as being relatively disposed', not now attributing to things that are relative 'being spoken of as' but 'being' relative to something else.[203] For *being spoken of* does not reveal their essence, while *being* relative to something else does establish their very essence. And *being spoken of* is a property of other things such as parts, while *being* is a property only of relatives. That is why the head is said *of* something; but since its being is not to be found in its relationship with that thing in relation to which it is spoken of (for head exists as a substrate, and it is possible to give a *per se* definition of it;[204] but no relative is a *per se* substrate in so far as it is relative) the head would not be relative; for being *per se*, it is on this basis that it is spoken of as being *of* other things of which it is a part. But relatives, not being anything else *per se*, are thereby said to be relative, and have their very being in just this – in being relatively disposed. For if something exists in conjunction with some-

thing ese, it is not *ipso facto* also relative, viz. relative to that [something else]; for the line exists in conjunction with the plane, but it is not relative in the sense of a line relative to a plane; but in that it is a boundary, it is relative to what is bounded, and in that it is a part, it is relative to the whole. In this way the head too, as a *per se* substance, is not relative, although it has its being as part to whole; for a part is of a whole, and the whole is a whole of parts. But if relatives were to be characterised in terms of what is said of them, then the head would be said to be of the headed, and the hand of the handed, and the rudder of the ruddered. 199,1

But it must be taken into consideration that in so far as it is a head and is just what it is to be a head, it is not *of* something else, but *qua* part it is *of* something else. So it is relative *per accidens*, just as the house in so far as it is a house is *per se*, but in so far as it is the possession of someone, it is relative to something. Therefore, so that he should not be unduly worried over things that are relative *per accidens*, he offers another definition of relatives, rejecting the earlier definition, saying that being relative belongs 'to those things whose being is the same as being relatively disposed'. At all events what the double is, is the same as the relationship which the substrate has, and conversely the half is the same as the relationship towards the double, and nothing else. The earlier definition phrased in terms of being spoken of was applied to all relatives as a common accident which embraces a wider field (*pleonazon*); but relatives are, of course, not [what they are] because of that, but in so far as the subjects embrace a wider field[205] because of the relationship. That is why the earlier definition did not define the essence of relatives, while the second did define the essence; the earlier one does not reciprocate (*antistrephei*) with what was defined (for if something is spoken of as being relative to something else, this does not mean that it *is* relative to something), but the second one does. That is the opinion of Aristotle's other commentators.

The very scholarly Syrianus writes: 'he is entirely right to uphold his claim that neither primary nor secondary substance is relative; for all substance is *per se* and of itself, as Archytas too believes, while relatives are bound by their relationship to each other and are of each other. But I cannot see how it comes about that he says it follows from the definition offered of relatives that some secondary substances are relative. For if things that are said to be *of* something were strictly said to be relative, perhaps he could have said that the hand, when said to be *of* someone, is relative. But since it was clearly stated that "whatever is said to be just what it is [as being] *of* something else [is relative]", he should have examined the question whether the hand is said to be *of* something else as a hand and in so far as it is a hand, or as a part and not *qua* being just what it is. So just as when the ox

or the wood is said to be *of* someone – not in that they are just what they are but in that they are the possessions of someone – in this way, if the head is said to be of someone it is not said to be of someone in that it has such a form, but in that it is part of an animal and in that the relationship of relatives is one of its accidents, like certain others. And what is *per se* does not have to be ranked among relatives because of the definition offered. For the definition which he offers, "things that are relative are those things whose being is the same as being relatively disposed" is, according to Porphyry[206] as well, the equivalent of the earlier one, which was offered according to the same concept. For "things said to be just what they are [as being] of other things" do not have this feature for any other reason than that their being is the same as being relatively disposed.' But perhaps the difference lies in the fact that the earlier definition demonstrated being from *being spoken of* as from something more evident, while the second one demonstrated being spoken of from *being* as from something more causal.

Aristotle presents, as if it were revealed as some corollary to what has been said, the statement: 'if someone knows definitely one of the things that are relative, he will also know definitely that in relation to which it is spoken of.'[207] He shows that a consequence of this is the fact that the head and the hand are not among relatives. For it is possible to know the head and the hand when someone covers the rest of his body, but it is not possible to know whose they are. But if they were relative, we would know about them unconditionally, just as in the case of the double we know that [it is the double] of the half. He shows that the person who knows one of the two definitely also knows the other definitely from the fact that one relative is considered in terms of its relationship to the other, and that because of this it is inherent in the relationship and completes it and the other item to which it is so disposed. Therefore the person who definitely knows the one item also knows the other, to which the other of the relatives is relatively disposed.

After the reasoning on the basis of the concept he makes the same point from induction; for the person who definitely knows that four is a double knows definitely also the two of which the four is the double, and not only the common account of double and half which he knows. Similarly with what is more beautiful; if someone knows that it is more beautiful, he also knows what it is more beautiful than. But if anyone were to think he knows what is more beautiful definitely, but the inferior item, than which it is more beautiful, not definitely, there is nothing to prevent that thing which he supposes to be more beautiful from being inferior to everything. 'This is supposition', he says, 'not knowledge', meaning knowledge which is properly spoken of only in the case of universals.[208] But he himself made it clear that

he called accurate cognition in the case of perceptibles knowledge, saying 'for he still will not know it accurately'.[209] If this is so, then neither the hand nor the head nor any other substance will be found among relatives. For if someone wearing a hood stretches out his hand or some other part of his body, we will know definitely that it is a hand, but we will not know definitely whose hand it is. The reason is that each of these things is what it is not from being relatively disposed to something else, but from having such an essence and such a quality. If, then, we do know the parts definitely, but not those items relative to which they are spoken of, then the parts of a substance are not relative. But if they are not relative, no other substance will be found among relatives. For this is the only one which appears to be among relatives.

We should note that by means of this proof he shows that the individual parts, in that they are substances, are not among relatives; for these are what are definite. Why, then, did he draw the general conclusion:[210] 'if this [sort of substance] is not relative, then no substance is'? The answer is that however it is with particulars, so it is with universals. It was more cogently demonstrated from the fact that for them being is not the same as being relatively disposed. But he added:[211] 'it is difficult to make strong assertions without considering the question frequently'; for the philosopher does not make claims uncritically.

'What need', one might ask, 'is there, then, of enquiry for anyone not likely to discover the truth?' Because the very process of working through problems is not unprofitable, and because we will be more ready for the discovery if we work through the problems first, and because, even if something is not knowable, the problems surrounding it can be known and broaden our cognition and reveal why it is unknowable – and that too is very profitable. So his words were well spoken.

It is worth asking, in my opinion, whether there was any need of these words to assert that no substance is among relatives, since it is clear that substance, being *per se*, is opposed to things that are relative to something.[212] But perhaps they were not spoken *vis-à-vis* what was said immediately beforehand, but what was said earlier; for one could say that the person who recognises the hand of the person wearing a hood does not definitely know it; for he does not know the particular hand, but a hand, indeterminately, if recognising its individual form he does not know unconditionally also whose it is. But this might be the right moment, after the interpretation of the text, next to review the problems that have been raised, and to consider their solutions.

Some say that the particular substance is both said to be, and is just what it is, of other things; for in his very being Socrates is 'of the

god' – but clearly as a possession, not as something relative; so this is *per accidens*. Consequently in all cases which are said to be *per accidens*, the same solution will work; if someone substitutes what is *per accidens* for what is properly said to be *per se*, that which is not properly said of something else will be said. But if a man is said to be like a god, and in general if an image [is said to be] like a model, will such things be relative, although the relationship is not reciprocal? For, to be sure, god is not like man, or the model like the image. The answer is that the model reciprocates (for just as the image is of the model, so is the model of the image), but the likeness does not – the image is like the model, but the model is the model of a like image. If anyone objects to there being any sort of relationship between what is 'up there' and what is 'down here', he should consider the so-called unrelated relationship[213] and the unwavering foresight according to which the gods rule us and we are their possessions; they have foresight and we are guided.

Some people attempt to disparage the definition now offered as being more accurate on the grounds that it contains the *definiendum* within itself.[214] For in defining things that are relative to something he says that they are things 'whose being is the same as being relatively disposed (*pros to pôs ekhein*)'. But, in the opinion of Boethus and Ariston, he also made the definition unclear, which is itself a fault of the definition. That is why Ariston, changing it to make it clearer, says: 'things that are relatively disposed are those things whose being is the same as being relatively disposed to something else.' This is how Andronicus presents it too. But Achaicus resolves the problem by saying that the *definiendum* is not included in the definition, but he does say that [Aristotle] used the second 'relative to something (*pros ti*)' homonymously instead of 'relative to anything whatsoever (*pros hotioun*)', as if he were saying 'those things whose being is the same as being relatively disposed to anything whatsoever (*pros hotioun pôs ekhein*)'. But one might say this too, as before,[215] that it is necessary to clarify the primary and principal genera by means of themselves in that they have nothing more universal by means of which one could make a definition of them in the regular way. They resolve the problem as follows: 'it is possible to talk of white[216] in the sense of whiteness and also in the sense of the body that partakes of whiteness. If therefore one person says that white is a colour which divides our faculty of vision and another understands it as applying to the body that partakes, it is clear that the argument will seem absurd; for the body is not a colour which divides our faculty of vision. It is therefore a correction of such a mistake to say that white in so far as it is white and *qua* white is a colour which penetrates our faculty of vision, and the answer we were seeking is not contained in such an addition; for on the contrary, if the addition is not made the

definition is rendered false. In this passage, then, it is not unequivocally stated about relatives that they are the same as what is relatively disposed, but there is the addition "those things whose being is the same as being relatively disposed"; for the being of relatives is the existence of a relationship between one thing and something else; for example four and two are not relative in so far as they are four and two, but in so far as some excess of the greater over the lesser is considered,[217] the greater exceeding the lesser by just the amount of the lesser.'

Perhaps it is not possible to define relatives in any other way. For they exist only according to their relationship, and the account of the relationship, which is other than that of the subjects, endows the relatives with form. For it is not the subjects themselves that are the relatives, but the relationship one to another in which the subjects participate. So the person who defines the things that participate themselves is forced, because of the participation, to include the participation in the definition. The plural shows that relatives, which are being defined, are what participate (the particular character of the genus itself being singular). In general I do not think it possible to say of relationship itself that it is relatively disposed, but that it is considered in terms of one thing being relatively disposed to something other, just as the category of Having is not spoken of in terms of something having it, but something having something other.

This concept is more clearly shown by (a) the definition of Achaicus which says: 'whose being is the same as being relatively disposed to anything whatsoever'; and (b) that of Ariston and Andronicus which says: 'whose being is the same as being relatively disposed to something else'. For this was said as applying to the case of the things which participate in the relationship of the Relative and what is defined according to that relationship, even if it is possible to understand it in a way as applying to the case of the relationship itself. For the being of dispositional relationships is the same as the dispositional relationship of one thing relative to something else. The philosopher Syrianus resolves the problem as follows: the homonymity of what participates in relation to what is participated in is misleading. For [the latter] is closely interlinked with the former, which is why when one changes, the others come-to-be and perish, since they have confirmation [of their being] in them no less than in themselves.

In answer to those who ask what use the addition of the second definition was, the divine Iamblichus replies by saying: 'it is because the earlier definition contained justice and whiteness; for these too are said to be *of* something'. In reply to this I think we should quote Aristotle's arguments,[218] that it is one thing to be *in* and *with* something else, and another for something to be called just what it is *of* something else. For even if justice and whiteness are *in* something

else, they still have their own accounts according to which they are defined – unless one understands justice in so far as it is a state; in this respect it is also relative to something.[219] [Iamblichus] goes on to say: 'furthermore, the person who says that the thing spoken of as being of something else is relative, only produces the relationship of the one and fails to reveal the relationship of the two towards each other, and gives, as it were, the definition by halves because he includes other features which are not relative. But the second definition takes in the relationships of the two towards each other.' This too is worth noting; for how does the person using the plural only establish the relationship of the one? For if one does not wish to understand this as applying to both items, he will not understand the words 'whose being is the same as being relatively disposed' as applying to both. For [Aristotle] did not say 'relative to each other', but 'relative to something'.

[Iamblichus'] third point is: 'the former definition states that relatives are spoken of as being *of* something else, but the latter defines the very being and essence of relatives; according to the latter the hand is relative to something because it is spoken of as being that of something else, i.e. the owner; according to the former being a hand is not the same as being relatively disposed.'

In reply to this I think that it is easy to say that if something is correctly spoken of, it is necessarily what it is said to be. For being is the cause of being spoken of, while being spoken of is evidence of being; consequently the latter definition is based on cause, but the former is clearer in that it is based on the more knowable. But both arrive at the same concept since, even if anyone disputes the fact that being derives from being spoken of, it would easily be confirmed. But not even according to the former would the hand be among relatives. For in so far as it is a hand it does not have its being because it is spoken of as being *of* something else, but, if anything, because it is a part of the latter definition, just as we claimed in defence. That is why the two items, as part and whole, have a relationship towards each other; but as hand *tout court* it is not related to the whole nor the whole to it.

[Iamblichus] adds: 'furthermore, the second definition establishes that the relationship is a middle term between what are the subjects and what have the relationship.' The former definition does so too, if relatives have their definition in their reference (*aponeusis*) to something else, since he considers the reference as a middle term between what refers and that to which it refers. So much for that.

Another problem concerning relatives should be added to those already discussed: namely, we say that the ten categories are ten genera, and we claim that each of them is divided into its own species,

and we posit that one of the ten genera is that of relatives. But in fact the genus is the genus *of* species, and the species is *of* a genus; consequently, the genus of relatives would also [have to] be one species of relatives. This being the case many absurdities seem to be revealed.

First the highest genus will be a species; for whatever you say is highest, that is one species of relatives. Secondly, since we say that the Relative is a genus and that the genus is one species of the Relative, and since the genera by nature pre-exist their species, the genus will be prior to itself, existing before its own being and being before its own appearance. Thirdly, it should be said that if that which is relative is removed, the species of the Relative are also removed, and that one of these is the genus, and that if the genus is removed the ten genera are removed. Therefore the Relative removes together with itself Substance and the other genera, and it is absurd that when the relationship is removed, Substance is removed, which is by nature prior. Fourthly, if the genus is one of the species of relatives, then every genus will be classed under relatives; so relatives – which they say are like an offshoot, get their nature from outside themselves, are unable to exist *per se*, and have their being in something else – will be the single principle of all things.

Since these and many other problems emerge from the argument, it would perhaps be better to examine the same problem in a different situation and to apply the solution that is effective there to this problem. A question, then, was asked on a former occasion[220] about which of the categories Unity should be put in – would it be Substance in that it is bodiless and *per se*, or will it be ranged alongside Relatives as a measure and principle of number, or should we follow Alexander in putting it in Quantity as a part of Quantity? Wherever it is put, it is clear that Unity will be a species of that genus and that it is posterior to it by nature. Therefore is not that genus and each of the other genera *one* of the ten genera? Then Unity will pre-exist itself, and if it and its category are removed, they will remove with themselves the others too, since each of them is not one, but infinitely infinite. So we should remember what was said on that occasion, that Unity seemed to belong homonymously to the ten categories, as did Being, on account of the arrangement of categories in relation to each other. The division of homonymously named items among the categories would not be prior, nor would there be a determinate placing of them into one genus. Perhaps, then, it is wise to say the same things about the genus, that even if it is classed with relatives according to the relational, even so, in so far as it belongs homonymously to all the categories, in that respect it would not be classed definitively in any one category. For the genus is a common feature belonging primarily to Substance (since it is that which exists primarily) and other things

because of it, while the rest have their coming-to-be according to rank, just like a starting point (*arkhê*).[221] Yet even the starting point is among relatives; for that which starts other things is spoken of in relation to them. It is no surprise, then, that the genus is akin to relatives; for Unity was akin to Quantity or even to the Relative itself. But we should seek a more convincing solution to this.

We should realise that many of the genera are strictly among perceptibles and not among intelligibles – unless one is forced to transfer them by some other mode across to these intelligibles, just like Posture and Affection [i.e. Passivity]. Let the Relative be one of these. For no relationship is even so much as conceived 'up there';[222] for where one thing is not in something else – as relationship is in Substance – and there is no one thing and another in such a way as to be relatively disposed, how is it possible to consider relatives strictly in their case except by analogy, just as we say that 'up there' there are causes and effects? But in the case of enmattered things relationship does co-exist with them because of their extension and material differentiation, while in the case of the unextended, the immaterial and what is unified without parts, how could there be relationship, unless, as I said, it is as if distinction and differentiation are spoken of 'up there'? Furthermore, if relatives 'down here' have a supervenient nature and seem like offshoots, and have their being dependent on a change in external things, how is it possible to have these considerations in the case of what is 'up there'?

CHAPTER 8

206,1 ***Concerning quality***

8b25 I mean by 'Quality' that by which men are said to be qualified.

It is our intention to proceed directly from Relatives to deal with Quality (or, as it is entitled, 'The Qualified and Quality') so we must first discuss the order, even if much has already been said about it;[223] we must then accordingly discuss the title, since it too is somewhat strange, reading as it does 'The Qualified and Quality'; we must proceed with Aristotle's text.

Archytas, then, as stated above,[224] places Quality immediately after Substance, saying 'Quality comes second; for unless it is something a thing cannot be of a particular sort; and Quantity comes third'. Eudorus[225] too says that the discussion of Quality is closely linked with that of Substance, and that the discussion of Quantity belongs after that; for Substance co-exists with Quality and Quantity, and it is after these that the categories of Time and Place are introduced; for all substance, viz. sensible substance,[226] is somewhere and at some

time. It must be admitted that if Substance is the primary genus, and if the other categories receive their being and their order from Substance, and if Substance according to the form[227] is Substance in the strictest sense, and if Quality is a kind of form and shape in Substance (since things that are distinguished according to their forms are further defined by measure),[228] then Archytas[229] <must be correct in saying that Quality comes after Substance (although Aristotle surprisingly[230] puts Quantity and Relatives before Quality>, since natural substance is not without body, and body is not without magnitude, i.e. continuous quantity), while Relation supervenes as something posterior to these and perhaps the other categories as well. Some say that in natural substance Quantity is prior to the notion of Quality;[231] for it is not the case that, although matter *qua* matter is lacking in quality, it is ever lacking in quantity. In reply it must be said that matter is seen to be lacking in quantity for just the same reason that it is shown to be lacking in quality, namely in order that it should be ready to receive all magnitude; for if Quantity is entirely form,[232] then it must be admitted that matter is receptive of it too. Those too who assume that primary substance is body are put to the test by these arguments. 'But,' he will say, 'body is magnitude, and magnitude is a quantity and limited in relation to something, so that Relatives logically follow Quantity, and the other genera come after them, just as Aristotle arranged them'. It must be said in reply to this point that body is composite, and that we should not construct the order of simple things from composites, but the reverse – the order of composites from simple things. A further point is that body, in so far as it is body, is no less qualified than quantified; for corporeality is a quality, and that which is limited by figure[233] is fully limited, and the differentia of what enters the compound is a quality of the compound. In general being limited belongs to bodies according to quality, and a relationship between what limits and what is limited supervenes on this. Therefore it is clear that Relatives are quite consistently spoken of as coming after Quality.

But why will even Aristotle appear, not altogether unconvincingly, to put the qualified after Relatives? The answer is that he put Substance before Quantity because it is the source of its existence; he grants that Quantity is the cause of being for quantity that is relative to something; and it is from this that the *logoi* are derived[234] and it is out of these that qualities get their substantial existence (*hupostasis*), and in this way the order of the categories is woven. The reason for the order which pertains to our exposition is not to be disregarded; for in the account of Substance[235] he mentions Quantity when he presents the common features of Substance and Quantity, and quite consistently added Quantity to Substance; again, in that account, he established the great and the small among Relatives,[236] and men-

tioned Relatives after Quantity; and in the course of the argument he established that states and conditions belonged among Relatives,[237] and since these are *per se* qualities, he quite reasonably put the account of Quality next.

Some people justify the order in the following way: magnitude properly belongs to natural entities after Substance, since all natural substance is accompanied by quantity; after magnitude, that which is greater is viewed as being in excess through the relationship of excess to deficiency, and this belongs among Relatives;[238] after the greater the affections are implanted, viewed as differences in the greater or lesser magnitudes of the mass, such as hot, cold, dry, wet[239] – which are qualities. In this way, then, one might advocate such an order since [the order of] conception corresponds.

Concerning the title the following question is asked: why did he write, 'Concerning the Qualified and Quality'? Do both terms indicate the same thing? The answer is that 'Quality' indicates that which is possessed viz. the particular character itself, while 'the Qualified' indicates what partakes; for example 'whiteness' is the colour itself, and 'the white' is the thing that is coloured because of it. But if this is the case, which one of them is the category? Is [the category] the simple and incomposite form, or the compound of substrate and form, if these differ from each other? But if they are two, then they comprise two categories, and the same argument would apply to Quantity and Relatives; in one way they will be simple, in another composite; in this way the categories will cease to be ten and become at least twenty.

208,1 But perhaps, since even Quality itself and not just that which partakes of it is said to be qualified (for the ancients said that whiteness is white),[240] for that reason the title 'Concerning the Qualified and Quality' was given as it was; for whiteness is said to be something white, but the white thing which partakes of it is not said to be whiteness. The title does not seem to be Aristotle's own, for he did not give titles like this to the other categories; the followers of Achaicus[241] and Alexander[242] assume that it is a mistake on the part of the copyist, saying that someone found it in a commentary and wrote it down as if it were part [of the original]. If anyone were prepared to advocate its authenticity, he will have to say that 'Quality' and 'the Qualified' signify the same thing, guaranteeing it from what Aristotle himself says, who in his theological works[243] puts under Quality not only Quality pure and simple, but also the Qualified, making it an affection of Substance. But one sort of affection lies in being affected, and another in having been affected; the former is in the category of Passive, while the latter is Quality. If anyone claims that Quality and the Qualified are different in that the one is viewed as the simple form and the other together with the substrate, even in

this case the category of the Qualified and Quality is none the less a single category; for it has been stated many times[244] that one should include in one category all such things together with their privations, intermediates, capacities and negations (i.e. 'justice', 'just', 'justly', 'unjust', 'not just'); for all such terms will be in the category of Quality. So much for the title. When we have added some points from the investigation which are pertinent to the present argument we will proceed to Aristotle's text.

Plato seems to have coined the term 'Quality', as he himself clearly indicates in the *Theaetetus* when he draws attention to the fact that he has coined the term; he says the following: 'that which is affected becomes what is perceived, but not perception, while the agent becomes something qualified, but not a quality. Perhaps, then, "quality" might seem to be a strange term, and you do not understand that it is a general expression.'[245] Some of the ancients did away with qualities entirely while agreeing that there were things qualified, for example Antisthenes,[246] who on one occasion was arguing with Plato and said: 'Plato, I can see a horse, but I cannot see horseness.' Plato replied: 'That is because you have the eye with which the horse is seen, but you have not yet obtained the [mind's] eye with which it is contemplated.' There were others of this opinion.

Some did away with some qualities but left others intact. Of those who granted them substantial existence, some, like the ancients, thought that they were all incorporeal; others thought that the qualities of incorporeal things were incorporeal and those of bodily things were bodily, like the Stoics.[247]

The following question is universally disputed: are [qualities] the cause for themselves of being of the sort that they are, being self-constituting and acting on themselves, just as they are the cause for substrates both existing and being of the sort that they are? Or do they need other causes for their being, and do those need further causes, and so *ad infinitum*?[248]

There is a further far-reaching question as to which qualities we should posit as substantial,[249] and which not. For it is not easy to determine why the whiteness in lead and in milk, which is one and the same, should be substantial, [while it is accidental in most other things].[250]

The Stoics called quality a state, while those in the Academy called states 'havables' from their being had,[251] just as they called concepts 'participables' from their being participated in, and grammatical cases 'bearables' from their being borne; and they called predicates also concurrences (*sumbamata*)[252] from their concurring. The term 'havable' (*hektos*) derives from [the noun] 'state' (*hexis*), and later the term extended to include relationships such as standing[253] and sitting, and to movements such as walking around, and situations

(*katastaseis*) compounded of movements and relationships such as dancing. Others also included [under the term 'havable'] relatively disposed movements such as pouring in and pouring out, and even [included] relatively disposed relationships such as deceit, and also [included] those in the genus of movements and relationships, which some do not want to be either movements or relationships, such as right and wrong action in themselves are considered. Some consider that [the term] 'havable' should range only from states to activities, while others include affections as well, and Antipater[254] extends the term 'havable' as far as the common property of bodies and the bodiless, such as essence. To begin with, it was called 'havable' from [the verb] 'to be had' by a slight change in the form of the expression, but later the term seemed to have its own sense and not to have been derived from any predication. If 'state' and 'quality' mean anything it is always as something havable; but 'havable' is a wider term than 'state', as has been said. The view of Aristotle and the ancients on this question is as follows: they assume that all things that are havable are bodiless; for all things that are first are also by nature the most simple; since they are not even parts, but only causes of the things of which they are the havables, and since these are not external but contained within, they are all included, being numbers and *logoi* in matter.

The Pythagoreans called these causes of beings *qua* beings numbers and proportions (*logoi*) in matter – 'havables' as contemporary philosophers would say. Others held that these were bodiless *logoi*; corresponding to these *logoi* which keep varying from themselves and from each other arises the variety of beings, both the differences in primary elements and those of the compounds which they compose.

These numbers and *logoi* are everlasting, just as matter is; but their movements, their positions and their order relative to each other are liable to change and not everlasting. Just as the *logoi* are inherent while remaining separate, not yet giving the substrate shape and figure, but, like the *logoi* in the seed,[255] being present in an unsubdued manner *per accidens* as if they were inherent; and just as the form of the statue is in the soul and in the art, and just as colours are in our vision when it sees the coloured body; so the *logoi* are inherent while remaining separate. But the nature of the form is a cause in an immediate manner, if nothing inserts itself between what is participated in and what participates. By its very being it is present to that which participates, and thereby endows it with form. But by its presence it ultimately gives existence, of itself, to something else, which people these days call a predicate (for example, being wise comes from wisdom);[256] but the body (for example, the wise man), is always there as an intermediary between the first cause (for example, the form of wisdom), and the final predicate which results from it (for

example, being wise). For wisdom is the cause of the wise man and his being wise, and health is the cause of the healthy man and his being healthy – of which the former is bodily, the latter bodiless. Wisdom itself and health itself, whether or not they exist *per se*,[257] will be the most simple, primary and bodiless things; similarly being wise is bodiless, since wisdom itself, when relatively disposed, becomes 'being wise'. Wisdom *per se*, being participated in thereby becomes 'being wise'; in respect of the wise man it is something concrete, a fact; but in respect of us and our mode of expression (which is the same thing) it becomes a predicate (for the wise man is said to be wise); in respect of us when we speak it is an appellation concerning someone; in respect of the person about whom it is said it is a state (*hexis*) of someone, viz. a state which is participated in. But wisdom becomes 'being wise' not only in respect of the person who participates in it, but also in respect of the time in which something is one and the same in both ways (i.e. the substrate and the time), and the state and the man are together and in one and the same time, the latter as a substrate and the former in a substrate, the latter participating and the former being participated in. It was quite reasonable of them to say that being wise is bodiless, and quite consistent with the fact that wisdom is bodiless; for the relationship (*skhesis*) and the possession of it are bodiless, and for that reason being wise will be bodiless. They said nothing of wisdom and being wise when they are to do with ourselves, since that followed from the fact that the state (*hexis*) was ours;[258] for if that is to do with ourselves,[259] then participating in it is not *per se* beyond what is to do with ourselves.[260] Such, then, is Aristotle's doctrine on primary causes, which some call 'havable' (*hekta*).[260a]

We should proceed to the text: 'I mean by "quality" that by which men are said to be qualified.' That which participates becomes qualified by its participation in a quality; for example [something is] white by its participation in whiteness. But the following objection is raised: 'it is absurd to explain the prior in terms of the posterior and what is equally unknown, and to define things in terms of themselves;[261] for if a quality is that which the qualified thing has, and the qualified thing is that which has the quality, it has been defined in terms of itself.' In reply it must be said that it is impossible to explain the primary genera in terms of priors, nor can we produce an explanation of them, according to the order in nature, from what is more important and more of a cause (for there is nothing prior to them), but we must make our observations from what is more immediate and more knowable. The qualified is more knowable and more immediate to us than a quality, since some people do away with the quality on the grounds that it has no sort of existence, but no one does away with what is qualified; Antisthenes agrees that he sees the horse even if he does not admit to seeing horseness; the former is seen by our eyes,

the latter is comprehended by our reason; the latter is prior by its rank as a cause, the former is posterior in that it is a result; the former is a body and a compound, the latter is simple and bodiless. Plato bears witness to the obscurity of the term 'quality' when he says in the *Theaetetus*:[262] 'perhaps, then, quality might seem to be a strange term, and you do not understand that it is a general expression.'

Further, whether the qualified thing is an actualisation of, or a participation in,[263] a quality, that which exists in actuality is more evident than that which is prior as an unclear cause, and that which participates is more evident than that which is participated in. That is why the white thing is clearer than whiteness, and the educated man than education. Even if the qualified thing is spoken of in terms of the quality, even so the quality becomes more clearly revealed in the qualified thing. So if the qualified thing is more knowable than the quality, it was not wrong to define the latter in terms of the former. For it is not the case that this is the *definition* of quality: 'quality is that by whose presence that which participates is said to be qualified.' For no other *primum genus* has been defined. But the method of explanation which starts from what is said is proper to the purpose of the *Categories*, it is claimed. For it attempts to demonstrate [a quality] from the fact that the qualified thing is spoken of in terms of the quality. The method of explanation has been taken from its very nature as quality; for quality consists in being participated in and producing the qualified thing. It is known through the very thing in which it subsists, and not simply from its posteriors but from the very thing that inheres alongside it [in the perceptible body].[264]

But [Aristotle] does not define the same thing[265] in terms of itself; for the quality is one thing, and the fact that it is participated in is another – even if being participated in belongs above all else with it. This definition agrees with Aristotle's doctrine about quality and state. For if, according to him, the state is ours, and if the quality exists in us, and if the quality which is participated in is the same as what is called the quality pure and simple, then it is clear that quality is equated with the qualified thing. If Aristotle says nothing about havables and activities in ourselves, and if the members of the Academy [place] both outside us, and if the Stoics say that havables are in us, but that activities and actions are outside us, conflating the two doctrines, Aristotle was self-consistent in joining the qualified thing to quality on the grounds that both are in us.

Some of the Stoics[266] define the qualified thing in three ways; they say that two of the meanings cover a wider field than quality, and that one of them, or part of one of them, matches it. They say that according to one meaning everything that is differentiated[267] is qualified, whether it is changing (*kinoumenon*) or in a condition

(*iskhomenon*),[268] and whether it is hard or easy to remove. In this sense not only the wise man and the man holding out his fist, but also the man running are qualified. There is another sense, in which they no longer included changes but only conditions (*skheseis*), which they also defined as that which is in a certain condition because of a difference, for example the wise man and the man who is on his guard. They added a third sense, which is most specifically qualified, according to which they no longer included those who were not in an abiding condition, whereby the man holding out his fist and the man on his guard were not qualified. Of those who are abidingly in a certain state because of a difference, some are so in full keeping with their expression (*ekphora*) and conception, others are not so – and these they rejected, while those that were in keeping and were abiding because of a difference, they said were qualified. They said that those that were equally present with the quality, like the educated man or the wise man, matched the expression; for neither of these is more or less than in accord with the quality; so too with the food-lover and the wine-lover. But those who not only have these characteristics but also put them into practice, like the person who overeats and overdrinks, are so described because they have the wherewithal to enjoy such activities. That is why if a man overeats he is also always a food-lover; but if he is a food-lover, he does not always overeat. For if the wherewithal of his eating fails he leaves off his overeating, but he does not lose his food-loving condition. In this way, then, qualified is spoken of in three ways, and quality matches the qualified thing in the last of the three senses of qualified. That is why, when they define quality as a condition of the qualified thing, we must understand the definition as if the third sense of 'qualified' is being used. For quality is spoken of in one sense according to the Stoics themselves, but 'the qualified thing' in three. But if a quality co-subsists in being participated in, and the qualified thing co-subsists along with participating, and if both of them are in us because of one and the same fact (and not both outside us, and not one inside us and one outside us), it is clear that they are equally present with each other because of the substance itself, and there is no need of any device of 'meanings' or any addition of parts in order that the third meaning of qualified should be co-extensive with quality. So far, so good.

But Plotinus[269] asks what quality is, that it produces what are said to be qualified men: for it has been stated that men are said to be qualified because of the quality, but no definition has been given of what the quality itself is according to its proper account. In reply Porphyry says: 'the account of quality is conceptual (*ennoêmatikos*) but not substantial (*ousiôdês*). A conceptual account is one which is taken from what is knowable to all and commonly agreed by all, for example "good is that by which it happens that we are benefited, the

soul is the source of life, sound is the proper perceptual object of hearing". A substantial definition is one which also explains the substance of what is being defined, for example "good is virtue or that which participates in virtue, the soul is self-moving substance, sound is air when impacted upon". Conceptual definitions, in that they are commonly agreed by everybody, are the same, while substantial ones are produced according to individual schools and are disputed by those who hold differing opinions. At least the ancients, when they define sound as something bodiless in actuality and as an impact, do not agree with those who say that it is air and body; and those who extend the good throughout all things are in disagreement with those who confine it to virtue and the noble. So in elementary introductions [to philosophy] it has seemed wise to use universally agreed definitions, since these are more knowable and more suitable for an elementary work. But others have need of first philosophy, which deals with being *qua* being. That is why Aristotle offered the substantial account of quality in the *Metaphysics*, and the conceptual account in this work.'

Even this was well put, and an even better explanatory statement is the one which says that if a quality were *per se*, it would be necessary to ask what a quality is [such] that it is participated in; but if it belongs to us and does not exist outside what is qualified, it is clear (a) that in its case being and being participated in are not two different things, and (b) that it is not *per se* in one mode, while giving being and predication to the qualified in another, but (c) that being possessed, existing and producing the qualified are viewed as the same way in the case of a quality; for a quality is the form of whatever possesses it. So the person who defines a quality by means of what is qualified shows its particular character in the strictest sense, and at the same time indicates what it is and what effect it produces in entities.

'But', they say, 'if what is qualified exists because of the quality, the person who is ignorant of the quality would also be ignorant of what is qualified.' But even if what is qualified exists because of the quality, what is qualified is more evident than the quality; this is particularly so with regard to more generalised concepts which are suitable for introductions to philosophy; for although a man exists because of his manhood, even so the man is more knowable than manhood, in that the perceptible is more knowable than the intelligible. That is why it is not true that they are similarly unknowable; for what is qualified is something perceptible and knowable to those who have perception – which almost all of us do have; but quality is something intelligible, and knowable only to those who have intelligence – and few men possess real intelligence. But they appear to be similarly[270] unknown because of the similarity of the terminology –

for who thinks he is ignorant of white, hot or beautiful, all of which are qualified things? But when we want to know each of these more accurately, then we search for the quality because of which these things exist.

'But', they ask, 'how can the definition be sound, since some qualified men are spoken of without the quality having a name? Is it no longer true that these are qualified because of a quality? A man is not said to be a boxer or a runner as a result of qualities of the same name; for we do not talk about "boxerhood" or "runnerhood".' It would be better to say that, even if [such qualities] have no name, the nature of the realities is not deficient for that reason; even so it would be possible to find a term where the potential matched the actual,[271] such as 'the skill of boxing' and 'skilled in boxing'; or, if we are to preserve the similarity of terminology, let us create other names. Andronicus[272] and his followers thought that they should be called not after the potentiality that they have (for that is how we name those who are well conditioned to the intended state), but after the one that they will have.

The Stoics[273] too according to their own propositions would raise the same difficulty against the argument which states that all qualified things are spoken of in terms of a quality. They say that qualities are 'havable', and restrict 'havables' to things that are unified, while in the case of things that exist in combination, like a ship, or in separate parts, like an army, they say there is no one thing that is 'havable', and that no single instance of spirit[274] is found in their case, or anything possessing a single principle (*logos*) of the sort to achieve the existence of a single state. The qualified, however, can be seen in things which exist in combination and separate parts; for just as a literate man, who is one, remains abidingly the same in differentiation because of a certain sort of acquisition of knowledge and education, so too a chorus remains abidingly the same in differentiation as a result of a certain sort of rehearsal. That is why they are qualified because of their arrangement and their co-operation towards a single function,[275] while they are qualified without [possessing] a quality; for there is no state in them; for in general no quality or state is to be found in substances whose parts exist in separation and have no connate unity with each other. But if there can be something qualified without there being a quality, these two things are not co-extensive, they would claim, nor is it possible to define the quality through what is qualified.

In reply it can be said that the form, being bodiless,[276] extends over many [parts] as one and the same, being the same whole throughout. If this is so, there will be a single quality which pervades things that exist in separate parts and in combination. But if anyone were to refuse to accept this assumption on the grounds that it is alien to the

Stoic school, one could put up a stout resistance on the grounds that no arrangement, no relationship, no acquired conjunction, nor any other such combination produces the existence of what is qualified. Similar to this would be the production of existents from the non-existent, and living things from the lifeless. For in general the substance is something primary in each entity and does not later supervene on other things; so not even the qualified thing will get its existence in this way. For if the form is without parts and a unity, quality and the qualified will never be found in a similar way in what exists in separation and is not unified. For this is present in the things that participate in it in an undivided manner; for example the white is present throughout the participating body as a whole. So quality, which is one and without parts, holds together[277] what has parts, and quality and the qualified are never present in things that are divorced[278] from each other and in things that do not have a natural unity.

If I too am to follow in the steps of such eminent men and propose a further difficulty concerning the definition of Quality, I would say that such a style of definition would suit all the categories. For we would say that Quantity is that according to which things are said to be quantified, and Relation is that according to which things are said to be relative to something, and Substance is that according to which things are said to be substances. For even if, in the case of Quality and Quantity, that which is participated in and that which participates go by different names, such as Quality and the Qualified, while in the case of Substance and the other categories the names are the same, even so we should not allow a deficiency in the nomenclature to do away with the realities themselves; we should rather understand that on many occasions the name falls short of the reality, which nevertheless exists. Why then did [Aristotle] produce this formula only in the case of Quality? For even if what is qualified is more knowable than the quality, what is quantified is more knowable than the quantity, and so on; and even if, according to the Peripatetics, the quality and the qualified, which are in the same entity, co-inhere [in the perceptible body], it is the same with quantity and the quantified, and so too with each of the other categories in relation to what participates in them. What then did Quality have which is of a special character, according to which it alone of the categories deserved to be defined in this way?

Well, perhaps every differentia which results from participation produces some special characteristic and another species. So if every characteristic and every species is defined in terms of Quality, it is clear that in the case of the other categories too participation occurs according to a qualitative imparting and partaking. For that which participates in Quantity, and thereby becomes quantified, has been

subjected to differentiation of a certain characteristic according to which both Quantity itself and the quantified participate in Quality. If what I say is right, then the fact that qualified things are spoken of in terms of the quality is quite reasonably seen as a special feature, since the other things[279] produce a chromatic range in whatever participates in them because of Quality.

Iamblichus,[280] seeking more intellective causes in the case of Quality, first of all rules out those which are not properly described, and then, being in this way in philosophical agreement with Aristotle, he reveals what are more refined concepts about them. First of all he repudiates those who give substantial existence to Quality because of a common feature which is conceived by us on the basis of many separate particulars. For in that case both the quality and the havables are likely to lack substantial existence, since no substantial existence is introduced by such concepts.[281] That is why the philosophers of Eretria[282] did away with qualities on the grounds that they have no sort of common substantial feature, but exist in particulars and compounds. Dicaearchus[283] on the same grounds agreed that animals exist, but did away with their cause, the soul. On the same basis Theopompus[284] asserted that the sweet body exists, but that sweetness does not. They posited that qualities are neither bodies nor bodiless, but assumed that they are mere concepts, empty expressions lacking any real being, such as manhood or horseness. In fact,[285] even if some people introduce qualities on the basis of commonly ascribed predicates because of the common properties of bodies and the bodiless in the case of things that belong together homonymously, as roofing from being roofed, equality from being equalised, and corporeality from being corporeal, not even they make a correct assertion. For the states do not exist as a result of an accident of the predicates; for example, it is not because standing separately is an accident of pillars that separation can be seen to be the case with them. For predication is conceived of as extending only to what one says, and can be conceived as applying even to unreal things. But qualities have prior existence as an effective prior cause. They are so far removed from merely following predications that they actually introduce the current predications.[286] For example, wisdom introduces being wise either as something being exercised or as something being partaken of.[287]

In objection to Democritus and Epicurus the question can be put:[288] why on earth do they grant certain differentiae to atoms such as shape, weight, solidity, corporeality, edges, size and motion, while asserting that they possess neither colour nor sweetness nor life, and that the *logoi* of other such things do not pre-exist? For it is absurd, since there is a common account (*logos*) of the havables, not to classify like with like; it is even more absurd to make the most primary powers 217,1

secondary, such as life, intellect, nature, reason (*logos*) and the like. It is equally impossible for these to be produced out of the conjunction [of atoms]; for according to Democritus colour and suchlike are by convention, and only atoms and void exist in truth. But once a person has done away with realities, he will have nothing to put in their place, and he who admits the causeless will have no ground to stand on.[289] For why should the person starting from no definite cause prefer these to the contraries?[290] So it is better to have recourse to the hypothesis which produces the havables from being had, in the way that the Academics defined 'havable' by representing it as 'that which can be had', not accepting the definition on the basis of its etymology; for such a thing[291] is discussed linguistically, not practically. So 'to be had' indicates rather that the forms [are had] by what can have them. 'To have' is said in many senses (for we 'have' parts of the body as well as external things such as a field or a house), and they distinguished the havable from these as something additional, claiming that it is what can be had, in the way that wisdom is had by the wise man, walking by the walker, and sitting by the sitter. But since some considered them in terms of states, others in terms of easily removable relationships (*skheseis*), others in terms of relatively disposed changes, they have called all these 'relatively disposed' for the sake of clear exposition; and just as havable is spoken of in a wider context than state, so they assumed that what is relatively disposed has a wider connotation than the qualified. Some assumed[292] just this much – that what is relatively disposed covers a wider field than what is qualified, in so far as that which is relatively disposed in a certain way extends also to include that which is relatively disposed to something, while that which is qualified comes to a halt at things that exist because of differentiation.[293] Others offer a different treatment. But they are wrong in that at one and the same time they say that the havable is had and assume that it is separable. Secondly it is not made clear in this way how it is had, nor how it is present, nor what these bodiless forms are that are participated in; all such things are muddled together by them in disorder and indeterminacy. The reason is that these people, while admitting substantial existence[294] in the case of the forms did not keep it at the level of primary hypotheses, but carried it down as far as the *infimae species*. But it is impossible to reconcile what is the case with the most primary entities of all with what is the case with the lowest.

The Stoics[295] say that the qualities of bodies are corporeal,[296] and those of the bodiless are incorporeal. Their error is due to the fact (a) that they think that causes are of the same substance as their effects, and (b) that they assume a common account of cause in the case of both bodies and the bodiless. But how will the substance of bodily qualities be of a spirituous nature when spirit (*pneuma*) itself is

composite,[297] made up of a plurality, made up of parts and has its unity as something acquired so that it does not possess its unity either essentially or primarily from itself? So how could it provide anything else with this cohesion? 218,1

We esteem more highly than all others Aristotle's admirable doctrine of Quality; not only is it stated explicitly that Quality is incorporeal, in that bodies are distinguished by their differentiae according to Quality; but also, when he says that qualified men are spoken of in terms of their qualities, he defines qualities as *logoi* that give form to the qualified,[298] while, when he says that the qualities are present in the qualified men themselves, he then asserts firmly that the *logoi* too co-exist along with the matter in matter although enjoying substantial existence *per se*. For the qualified would not be said to exist because of them, if in fact they were entirely of matter and did not stand on their own when giving existence to matter – in this way exist alongside it separately. But since people are said to be called individuals of such a sort because of quality, and are distinguished, individual by individual, in analysis, the *logos* of qualities will also be found in divisions. But because they (the *logoi*) are said of things, they *look like* something [merely] said, and each imposes itself on others, all spread out, because each *logos* has gone forth and is being said of things different from it. But what produces is the quality-making cause of quality which is linked to the qualified. Because the qualified exists in accordance with the quality, at one and the same time the quality gives itself to what is qualified as being something other and remains unchanged – although it is changed *per accidens* by coming to be of what does change, and existing in it.[299]

A very clear definition of the existence of qualities is given by him. For if anyone were to define them as being separate, as Plato claims the Forms are, then they have no existence; for how could our state (*hexis*) and that which is participated in *per se* be separable? But if anyone were to understand them in the sense of being present in us, participated in within the qualified and possessed in such a way as to be participated in, then they will have true substantial existence. For if quality is that because of which we are qualified, and if we are qualified because of what is inherent (since I call something white because of the perceived whiteness in it), it is clear that what is separated[300] is the form, even if it is whiteness or manhood, but it is not a quality; for the quality is what is participated in. That is why qualities will not be *logoi* of themselves; for the *logoi* are primarily of what is qualified. But even when qualities give out from themselves *logoi*, which are other than themselves,[301] as derivatives, they are not *logoi*, since these are entirely of what is qualified. But it is not the case that the *logos* in one way remains and in another proceeds outwards,[302] or that in one way it is incorporeal and in another 219,1

corporeal, or that in one way it is divided and in another undivided;[303] for all of them are of what is qualified. Nor is it the case that it is a single *logos* having double activities; for if so it would in a way have a *per se* existence. On the contrary, it is a single *logos*, but it is merely participated in, and gets its existence from that. It is clear that quality is not the separated and unparticipated form, but that which is participated in is the *logos*. For Aristotle thinks that it has substantial existence by being participated in *per se*, and he believes that it is an unmoving activity, but asserts that, being without bodily organs, free of all leverage and all bodily movement, it produces all its *per se* effects, and asserts firmly that it is something other than the *logos* in terms of the shape; for this is at the end of the chain and produces nothing,[304] while it produces many effects and is not at the end of the line; the one is seen as being lifeless, while the other has some manifestation (*emphasis*) of life; the one is inefficacious, while the other is conceived of in terms of its efficacy. It is perhaps the case that Aristotle is talking about the particular character in terms of the shape, because this characteristic is engendered by some affection of the body, while others wrongly assumed that this was said about qualitative *logos* at large. Furthermore the shape is contained by the body because of some single differentia, whatever it happens to be, while qualities have some latitude (*platos*),[305] and the same quality can belong to many entities. So for the same reasons it seems that quality is other than figure; for figure determines the boundary of magnitude from the outside, while quality produces the same characteristic throughout the whole of what is qualified; figure is posterior to magnitude, while the qualified is prior to magnitude. So what sort of a thing is the *logos* of a quality? Not something which contemplates itself or which occurs because of contemplation or enquiry, but something which has and gives what it has, which produces by being just what it is, which produces in the very having, and which is the cause of everything by remaining what it is. It is in no way complete and fully determined, since it is mixed in with what is entirely incomplete and indeterminate; but it is not entirely at the end of the line and indeterminate, since it gives order to all that is material, and has concern for it in a regular manner to the highest degree;[306] in these respects *logos* can be reduced to something single. So whether the *logos* of the quality is in something small or in something large, it is one and the same. Therefore quantity contributes nothing to its existence, as some people think Plato says, but it is divided in an undivided manner among bodies. If you were to make these assumptions about quality you would not be out of step with the truth and Aristotle's doctrine about quality.

8b26 Quality is one of the things which are spoken of in several ways. 220,1

After discussing the being of Quality Aristotle proposes to present its division, and he distinguishes the species of it just as he does of the other genera. For scientific understanding both considers what each thing is, and distinguishes its species systematically. Aristotle says that quality is 'one of the things that are spoken of in several ways'; since things that are homonymous seem to be spoken of in several ways, he concludes that quality too is an equivocal term. But equivocality does not constitute a genus, since genera are univocal; consequently quality cannot be divided into species as genera can, but into four significations as things homonymously said can.

So it must be said that 'in several ways' has many significations; for a predication made of several items in a common sense is made in several ways, while predications made both homonymously and univocally in particular senses are made in several ways in that they are differently made;[307] so these predications could have been made in a common sense as being made of several items, or else in individual senses,[308] being made univocally but differently. [Aristotle] himself shows this by adding 'So let states and conditions be called one species' (and not 'one signification') 'of Quality'.[309]

Alexander and his supporters think that '[spoken of] in several ways' can be properly said in the case of Quality on the grounds that it is not to be found in only the genus bearing its name which contains states and conditions, but also in the other categories. For in all the categories genus and species indicate a quality in whatever they are the genus and species of, for example the qualitative in a substance, or any other genus. [They think that] it was because he wanted to show this that he said 'Quality is one of the things which are spoken of in several ways',[310] and having said it he proceeded to make the division not of Quality spoken of in many ways, but properly spoken of as one of the ten genera. The more exact of the commentators complain that genera and species are wrongly described as qualities, and qualified things as being in the ten categories; for in each case the former are substances, and bring being to completion, while the qualified thing is everywhere posterior to substance and contributes to the addition of the nature of such-and-such a kind.

Perhaps Quality is spoken of in several ways because its species are not of equal status, some being superior, others inferior, some more complete, others less complete, some having their priority and posteriority in the potential, others in the actual in respect of all these attributes, since they would increase in number from and around [an original] unity, and differ from each other by a slackening of the primary power. Therefore Quality can in this way be spoken of in

several ways; for state, power, passive quality and figure do not have equal rank, but the division always descends to the weaker species of what is qualified, and in this way such things are like what [is named] after a single thing and in relation to it. To be spoken of in several ways does not properly apply even to what is equivocal or what is univocal, but, as [Aristotle] himself clearly says in the *Metaphysics*,[311] to what is named after a single thing and in relation to it (for one and the medical are spoken of in many ways); but 'severally' can be used in the case of things homonymously and things synonymously predicated, even if this is rare. But this multiplication of qualities can proceed from a single genus, so that Quality can be predicated of them univocally; but the division does not proceed to opposite and co-extensive species, but always to the inferior; in this way the term 'severally' will be preserved.

'But', they say, 'if what is common is one and the same, but produces the plurality of species by means of specific differentiae and by being predicated of several species, and if it is in this way that it is spoken of in several ways, it must be stated what the common feature is in the four species of Quality.' In reply we must be aware of the difficulty of finding the solution; for it is not easy to discover a quality of a quality (nor is there any need, if we are to discover the distinctive feature of Quality) or a differentia of a differentia – for a quality is a differentia. So we must yield to the nature of the problem and not try to track down each thing any further than its nature makes evident. Iamblichus says that the reason for the difficulty on this question is that when we seek a common feature in something that is enmattered and has parts, we are then, because of the differentiation in matter and the division of particulars, drawn to the determinate characteristics in which the common feature inheres (for it does not enjoy substantial existence *per se*). Again, because of the conception of what is common, in so far as it is general, we separate it from the particulars and think of the genus *per se*. So at one and the same time our conception is torn apart in opposite directions and forced to detach itself from what it has a grasp of, and having been detached from them it none the less remains in them; for it is not possible for what is common to exist or be conceived of apart from them. For this reason intellection and explanation of it is difficult. For the common feature is differentiated, and the differentia exists together with the common feature, and neither can exist without the other. But the reasoning and the conception before the reasoning captures these mixed natures with difficulty, but it more easily understands those that are far apart from each other, because it is keen to take in the common feature and the differentia individually. So let the common feature of these four be the one which produces the account (*logos*) of Quality, for it is engendered either more or less,

proximately or distantly, pervasively or superficially, with a view to predisposition or completion. In this way the account would be one and common, while its shared presence would be divisible four ways. If this is what we were seeking – what the *logos* of Quality is, and what its difference compared with the *logos* of Substance is (for that is not yet clear) – then it must be stated that the account of Quality, getting its existence from something prior, is posterior. For the intellective and paradigmatic *logos* of whiteness[312] is not a quality 'up there', but it produces from itself the quality which is engendered in matter. If it itself were called a quality, it would not be surprising if the causes and their effects were called by the same names. Properly speaking a quality is named as that which supervenes second after the form and co-exists in the pre-existing substance as something implanted in composite natures, and everything that participates has the presence of such an account as something one and the same inherent. Therefore the *logos* of Quality is an appendage of Substance, and is always considered *per accidens*, deprived of real being, a manifestation of form and an image of the prior *logos*, occurring as one thing supervening on another, like something acquired and coming in from outside into what participates. Such a *logos* which is properly considered in terms of the quality is the common feature of the species that participates in it. The genera themselves, in so far as they are genera, are distinct from each other; for the *logos* of Substance is one thing, and that of Quality another, and the generic *logos* of each of these is entirely separate. Therefore the appropriate *logoi* of each category ought to be reckoned as the ones common to what is specifically distinct, as many as they are and of what kind. Let the same definition stand for each species too; for in each of the ten categories the species is properly defined, as a result of which the category is suitably prior to each [species], and it is fitting to include its common feature in each category in a proper manner, so that in the case of Quality too we employ the same definition concerning the common participation according to the species, which we should range, as being generic, above the several species in it.

The Stoics[313] say that the common feature of Quality in the case of bodies is the differentia of Substance, which is not *per se* separable, but which stops short at being a concept and a particular feature, not given its species by time or strength, but by its intrinsic 'suchness', in terms of which the coming to be of something qualified happens. On this question, if it is not possible for there to be a common property of the corporeal and the incorporeal because of their *logos*, Quality will no longer be a single genus, but will exist in one way in bodies and in another in the bodiless, and for this reason will be put under different genera. What is even more absurd than this is to say that qualities do not have substantial existence but 'stop short at being

a concept' – unless, of course, they are said to terminate at a concept and a particular feature not in the sense that Quality is without substantial existence, but because it is not separable *per se* in the way that Substance is, but only in concept and by its particular feature. Its own 'suchness' is unclear and applies to Substance no less than to Quality, unless of course being 'such' is a particular feature of Quality, just as being 'this' is of Substance. But in what sense do they say 'according to which the coming-to-be of something qualified occurs', since they are of the same substance as their effects, because even they are bodily and even they are almost equally composite?

Plotinus proposed[314] that the common feature of Quality is the capacity (*dunamis*) from which that which possesses it (the quality) can do what it does; for this fits all four species of Quality. It is clear that he is using the terms 'capacity' and 'have the capacity' in a single sense, although they are usually held to have signification in more than one; for this is predicated in several categories. But we should stop to consider this point – that perhaps the difficulty has produced a circular argument.

The question put was whether there is no common feature of Quality, if it is spoken of in several ways; but by substituting 'capacity' for 'quality' we appear to have achieved nothing; for because capacity, too, is spoken of homonymously, just as it is difficult to discover the common feature of Quality, so it is hard to work out in turn just what the genus of capacity is. Perhaps even Plotinus' argument is correct; because quality is intermediate between the acquired properties and the substances in their own nature, for that reason it is comparable to capacity, which, too, has the nature of an intermediary. Because in some way it shares in the essence of the form, it can in that respect be characterised according to a single common account. But since it also joins in participating in the resultant category, for example the category of Posture or that of Having, for that reason it, too, takes on the additional feature of being spoken of in several ways, as capacity does. For in its case, that which is spoken of in several ways has its common co-existent feature from it either because of the fact that it is classified as dependent on or in relation to something single, or else because of the fact that the slackening of the capacity occurs in respect of the same thing. But since some capacities co-exist together with their substances and the activities to do with them, while others neither bring the substance to completion nor are parts, so to speak, of their substances, we must admit that qualities which supervene on substances – those that are not specific differentiae – are capacities; but some capacities are acquired. In this way the rational in man both completes the substance and is a part; but it would not be called a quality nor the capacity thought of in terms of quality. But skill in boxing, according to which we have a worthy starting point for the

art of boxing, is a quality and a capacity, since it is neither a part of a man nor does it in any other way complete his substance, since it is not found in all men. Inborn rationality is not something qualitative, but the rational which supervenes because of sharpness and sagacity is a quality in that it is of an adventitious (*episkeuastos*) nature. Consequently those [capacities][315] that complete the substance are not qualities, even if they seem to indicate the qualified substance, but those that supervene from outside on the soul or the body indicate an adventitious state, condition and shape, and these are qualities. For the quality that endows the substantial with form and belongs to it, not to itself, is always in the substrate. But if we call [the capacities] that supervene on substances qualities in an indeterminate way, we shall be speaking not so much of qualities as something else that is accidental in a different way. But if we add that which supervenes on substance, which is proximate to it and which lies next to it, in this way we would be best grasping the concept of the qualified thing. Therefore quality will be a capacity which adds being qualified to the substances subsequently,[316] linked to them by kinship, but nevertheless manifesting what does come after them, because it possesses what is resultant.

'But', says Plotinus, 'if capacity is like this, incapacities will no longer be qualities. But if these too are qualities, the definition of quality will not fit in every case.' In reply to this we must distinguish in what senses capacity and incapacity are spoken of. For if, as the Stoics define it, capacity is that which is capable of producing several properties, as wisdom produces wise discourse and wise conversation, according to such a definition what are now called incapacities will be qualities. For lack of skill produces many an error. But if the capacity which is capable of producing several accidents and prevails over the subordinate activities is spoken of according to some other Stoic classification, Plotinus' definition will fit in this way too; for vice, which is an incapacity according to the Stoic definition, prevails over its proper activities. And the intermediate arts,[317] however far they fall short of consistent activity, are nevertheless of such a kind that whatever possesses them has the capacity that it has; consequently such incapacities are included in the qualitative capacity. But if we follow Aristotle in distinguishing the several senses of capacity, Plotinus' argument on capacity and incapacity will be preserved in this way too.

Capacity, then, is spoken of in six ways by him. (a) One of them is that which results from the potential (*to dunamei*), according to which something can be in a state of propensity (*epitêdeiotês*); for example a child has the potential to read because he has the propensity for reading. (b) A second is the perfection of the propensity, which is the beginning of change; for example the person who knows the letters of

the alphabet has the capacity to read. (c) This capacity is also called a realisation, and it is in relation to this that the first capacity is incomplete and will be an incapacity included by the incomplete capacity. (d) Capacities are spoken of by him in another sense, that of active and passive, the former because [the action] proceeds from it to something else, and the latter because [the action] proceeds from something else to it. (e) Again the capacity in being affected is an incapacity for affecting, since it consists in another capacity, that of being affected. (f) Again he speaks of capacity in another sense according to which someone does something alone or better than others do; for example the walker able to walk further than anyone else, and the person swimming in the sea able to swim further than anyone else. The converse is true too; for we say that that which is able to suffer something for the worse has the capacity for that, as, for example, the man has the capacity for being killed. It is clear that this capacity is a privation, and in this way incapacity for the better will be a capacity for the worse; in general an incapacity for one thing will be the capacity for its opposite, and incapacity will not be entirely dissociated from the account of capacity, but will be subordinate to it; for what is imperfect is included in what is perfect, since it has the cause of its being from it. So incapacity is included in the account of capacity, since the most primary and perfect capacity would reach even to what is weakest. That is why even virtue is cognisant with vice. If this is the case, quality too will include incapacities on account of the fact that they too are capacities of a sort. Now both incapacities and privations are called capacities in that they perform their functions by being qualities, themselves making what possess them qualified things, and adding form – even if they are ugly. Because they cause what participates in them to be qualified, they are called qualities; but in so far as they perform their own functions, they will be called capacities. In general in each category privations were said[318] to be classified under the same genus as states. Aristotle clearly equates that which acts according to incapacity with that which acts according to capacity when he says:[319] 'in short, all things are spoken of in terms of a natural capacity or incapacity.'

But if capacity is spoken of in six ways, according to which signification will qualities be called capacities? Will it be according to a common propensity, because of which we are said to be suited to all skills, even if we do not practise them, or [the propensity] according to which Aristotle placed them among qualities? I mean the particular progress towards something as a result of nature; for the man who already has many advantages and natural stimuli towards them, like Hippolytus,[320] is naturally temperate. Or is it that not all of the qualities come under either of these capacities? For they are rather realisations. Most would be active and affect others – but not all; for

geometry and wisdom are qualities, but they have no effect on others – they merely cause those who are engaged in them to be contemplative through the study of them. Nor are all qualities productive of the good, nor are they all capacities of what is unusual,[321] although these are certainly easily numbered. But not all qualities will exist in terms of the capacity to affect or be affected; for hookedness, triangularity and figure in general do not have it in them to cause what possesses them to be active. Perhaps for this reason qualities are not equated with capacities, that we accept the particular but not the general signification of capacities. Something might be hastening towards fulfilment like that which has a propensity; something might be seen in a state of perfection, like the realisation itself; something might be acting on something else like the activity proceeding from the state of one thing against another; something might be being affected like motion imparted by something else; something might just be contributing to the accomplishment of some task for the best; or something might be bringing about a worse situation; in each case that something has a capacity in relation to these as a whole, and in this way that feature of capacity which extends to all these is something common. That which is viewed in this way as a common feature is closely linked to all the species of the quality. As for the perfect stable states, the conditions which are there for a short time, the progress which is produced in accordance with propensity and the qualities which arrive according to affection – form or figure – the common capacity can make these what they are and in general make them co-extensive with the quality. For the same cause, in as much as it makes them qualified, is a quality; but in as much as it has the capacity to produce the qualified things it is thought of as a capacity.

If anybody wonders how the figure and the individual shape can be a capacity, we will say that of effective capacities some act on other things from outside – as, for example, heat acts on that which is being heated – while others act on what participates in them by an unmoved activity, making them what they themselves are. So the cause of their being which they give them we call a capacity, not proceeding outwards but remaining within whatever participates in them. Of such causes, some in their entirety pervade whatever partake of them in their entirety (whiteness pervades the milk, for example, and, in short, any qualities we see are pervasive); others receive the quality on their surface and from outside (for example, shape and figure). Such things, then, have the capacity present to them from outside, giving an outline shape, and this will be a species of the capacity in its final stage, delimited by the surface and not extending through the whole mass. For the further away it is from the form, the more it is removed from its whole capacity. So hookedness makes that which

partakes of it the hooked thing, and triangularity makes what is triangular to be just what it itself is by the presence of figure.

But how are being and substances productive of activities *per se*? Clearly in terms of their capacities – but they do not have these capacities by participation in qualities. The qualities are capacities and for that reason they are active, but they are not active in a primary way nor do they only act. Consequently, it is not because something is active that it is a quality, but it is active because it is a quality. Similarly, the quality is not said to be simply a capacity, but a particular capacity; consequently, if it is a particular quality, it is a capacity, but if it is a particular capacity, it is not always a quality. Being *qua* Being will *per se* have a capacity, but it will not be empowered by participation in a quality, since the capacity in simple terms is something other than the quality. It was quite reasonable to presuppose that Being is most capable, because it has the most proper and primary capacity. Substances, which are the same as activity, have no need of quality, although they are capacities, since they have assumed a capacity prior to them and are capacities *per se*. In general the cause of a capacity comes down from above, extending through entities in their entirety, bringing everything to plenitude, holding everything together and completing everything right down to the lowest things such as privations.

But if we define quality mainly in terms of its character, how will this concept fit in with that of capacity? The answer is that this character does not conflict with capacity; for each thing has the capacity to do what it does because of its own character. But how can Quality be said to be invested with being according to its character, since each of the categories has its own character according to which it has its being and is different from the others? The answer is that they have their differences from each other and their particular characters because of Quality, just as they have their very substantial existence because of the substance; for the particular feature of Quality is to define substances in relation to each other, to produce the particular character in relation to themselves, and to direct the activity around the 'such' and the character, just as Quantity acts only around the 'so much', and Substance is to do with the substantial form.

228,1 So much for the abundant remarks of the abundance of commentators; we must now direct the discussion to Aristotle's text.

8b26-9a13 So let states and conditions be called one species of Quality. [A state differs from a condition in being more stable and long-lasting: the sciences and the virtues, for example. Scientific knowledge seems to be stable and hard to displace

even if you gain it in moderation, unless some major change occurs because of illness or some such thing. So, too, with virtue; justice, wisdom and suchlike, for example, do not seem easy to displace or variable. It is what is easy to displace and what changes quickly that we call a condition, (for example, heat, coldness, illness, health etc.). For a person is in a certain condition because of these, but can quickly change from being hot to being cold, or from being well to being ill. So with other conditions: unless one of these very conditions eventually happened to become irremediable and very hard to dislodge, and so [become] part of our make-up because of some persistent experience of in, in which case we might, then, call it a state. It is clear that by the word 'state' we mean what is longer-lasting and hard to dislodge. For example we do not say that those who have a poor grasp of scientific knowledge, and easily lose it, possess a state, even if they are in a better or worse condition because of such knowledge. Therefore a state differs from a condition in that the latter is easy to dislodge, while the former is longer-lasting and harder to dislodge. States are also conditions, but conditions are not necessarily states. For those who possess a state are also in a certain condition because of it;] but those who are in a certain condition do not also necessarily possess a state.

The words 'So let one species of Quality' show that he accepts that Quality is spoken of in several senses, but not equivocally. If anyone challenges the fact that it is a genus and is predicated univocally on the grounds of the order,[322] it must be pointed out that derivation from a single source distinguishes between what is univocally and what is equivocally spoken of not only in the case of Quality but also in the case of the other nine categories. For not even they are genera in the strict sense, nor are they predicated as genera of what is ranged under them; the order of prior and posterior applies on every occasion. Just as with the other categories, so here he starts with an outline of the nature of qualities, then turns to the division, and so to the concomitants.

But since Aristotle presents a fourfold division of qualities which manifests (*emphainen*) a sort of twofold division prior to the fourfold one, it is necessary to reveal (*ekphainein*) the consequence of the division, starting from the twofold one, just as Plato urges[323] us to divide numbers on a smaller scale first, if at all possible. For some qualities are natural, some acquired;[324] the natural ones are those which are by nature innate and are always present, while acquired ones are those which are brought in from outside and can be lost. Of these latter, let states and conditions be those which differ by being longer or shorter lasting and harder or easier to get rid of. Of natural

qualities, let some be potential, others actual; the former are those because of which we are said to be capable of something, while of the latter some are deeply ingrained, as with affective qualities. And we speak of these in two ways: either the result of causing an affection in the percipient, or the result of the qualities coming to be present as a result of an affection, such as sweetness, heat, whiteness and their kin. For these are qualities, since what possesses them is said to be of a certain quality because of them; but they are affective because they produce an affection in the senses or come to be as a result of an affection: 'for when you are ashamed, you blush; and when you are frightened you turn pale.'[325] Superficiality belongs to qualities which are actual, like figure and shape (which is the figure of something ensouled)[326] and colour (not *qua* colour pure and simple, since that has already been presupposed,[327] but in that it completes the shape) and all outline manifestations which are seen on the surface.

But everyone ought to observe, as Iamblichus himself clearly indicates, that it is quite possible for figure to be acquired; for the same thing is at one moment triangular, at another rectangular when it is remodelled by art. Similarly colour is not [always] natural, for example the paleness of the coward. It is also possible for a condition to be natural and not acquired (good and bad health, for example, which could be states since they are in the domain of nature). That is, perhaps, why Aristotle rejected the division into two. But why did he say in the first instance,[328] 'so one species of quality', and in the second, 'another genus of quality'? The answer is that because these species are also genera of other species, genera which cover a still broader field and which are subordinate [to higher genera], he calls them both genera and species – and not because he employs the terms 'species' and 'genus' interchangeably on account of not yet knowing the difference between them, as Alexander claims.

We should not understand states and conditions as two species distinguished by specific differentiae[329] in the way that man and ox are distinguished, but in the way that the man as a new-born baby differs from the man in his prime; for these (state and condition) do not differ in species, since the same account applies in both cases, for example that white is the colour which pierces the eye,[330] whether it be viewed as a state or as a condition. They do not even differ from each other in number as Socrates and Plato do; for no individuating set bundles together so as to create a numerical distinction.[331] But they do differ in time, as does the short-lasting white from the long-lasting white, and also in stability, as does the long established house from the recently established one. But the same account of the quality applies in both cases; for the qualitative appellation is almost the same in both cases.

Let the arts, sciences and virtues serve as examples of states. For

all these are hard to displace and have stability, unless they are expelled by illness or some such thing, or else by continued disuse. But virtues are even more stable, because we employ them in every activity, unlike the arts, and because the virtues are based on choice and what is up to us, unlike the arts. Aristotle himself now calls all the arts 'sciences' because of some common signification of knowledge. He says that knowledge is hard to displace, 'even if you gain it in moderation'.[332] The phrase 'in moderation' does not mean 'superficially' (for neither knowledge nor a state are of such a nature). But since some sciences are not entirely demonstrative, and for that reason are not sciences in the strict sense, as Plato demonstrated the mathematical sciences to be),[333] he says that those who have acquired such knowledge are slow to lose it; so 'in moderation' would be the same as 'a moderate amount of knowledge'.

Perhaps there is some intension (*epitasis*) and remission (*anesis*)[334] in knowledge too, as there is in state and condition. So even if one[335] is not extremely knowledgeable one can still possess it in moderation – enough to be knowledgeable – and in this way one's knowledge would be hard to displace, 'unless some major change occurs because of illness or some such thing'. For ill people can lose their knowledge, as someone in our own time in Palestine who had already advanced some way in logic but had then fallen ill forgot everything so that he was forced to go back to his teacher in pursuit of its reacquisition. This can happen for other reasons, too, as in the case of concussion. One can also forget everything because of drugs, as happened to those campaigning against the Parthians under the Roman general Antony as a result of eating a certain plant, according to Arrian in his account of the Parthian campaign[336] – except that those who survived by drinking large amounts of wine and olive oil were eventually restored to their natural state. (This remedy for the condition was accidentally discovered.) Similarly, he says that the virtues are not easily displaced, not because they possess the quality of being hard to displace in the same way as the arts and sciences (for they are steadier than these), but because these too are not easy to displace;[337] but they possess greater steadiness, as has been said,[338] on account of the fact that we universally accept their use and effectiveness, in every place, on every occasion, in every activity and in every circumstance of our lives.

He makes heat an example of a condition (not natural heat like that of a fire, but acquired heat like that of hot water) and coldness [an example of a condition] (not that of snow, but that of temporarily chilled bodies). These conditions can also depart. Illness and health too are easily displaced, for they quickly change to the opposite, unless one has a chronic natural condition, with either an incurable illness or rude health; then it is appropriate to call these not condi-

tions but states. It is confirmed by everyday speech that stable qualities are states; for people deny that those who cannot stick to a subject, but are unstable, have a state, although they are disposed in a certain way towards knowledge; for the unstable are said to have such a disposition.[339]

Iamblichus says: 'we must not think that condition (*diathesis*) is the genus of state (*hexis*); for some specific differentia must always be added to the genus for the composition of the species; but no such differentia is added when the unstable quality becomes stable. So in what sense then did Aristotle say:[340] "states are also conditions, but conditions are not always states"? For this seems to be a genus-species statement. But this is the case for genera in relation to species, because genera are predicated more widely than species. After all, states are not necessarily conditions in so far as a condition is usually predicated of them, but, on the one hand, a person is in a certain state because he is disposed (*diakeitai*)[341] according to the quality which is to do with state; on the other hand, a person is in a certain condition because a quality does not always have the disposed quality in virtue of a state. For, I suppose, blue-eyedness and snubnosedness are not present in the first place because of any intension (*kat' epitasin*),[342] although blue-eyed and snubnosed people are in a condition. So some qualities do change from being less to more intense, just as the acquisition of the arts is a change from the less intense to the firmer quality, while others do not become more intense, but make their appearance primarily because of an alteration; for example milk alters but does not become more intense when it turns into cheese; so too when clay becomes pottery and wine becomes vinegar. Therefore condition is not a genus.' So writes Iamblichus.

But Syrianus says:[343] 'the first species of quality is condition. Of this state is [a secondary species], while condition is equivocally named [and corresponds in one of its senses] to the genus.' Perhaps the common condition is not at all the genus of [the condition] which is the contrary of state, but they are just equivocally named, with the common appellation deriving from being in a certain condition, and the particular appellation from being in a condition *tout court*. For a condition is easy to get rid of not because it is stable, but just because it is a condition. It is one thing to be in a certain condition – stable or unstable – and another just to be in a condition. If the one condition were the genus of the other, then the latter would be likely to be in any condition whatsoever; as it is, it is merely easy to get rid of.

Nicostratus[344] criticises Aristotle for saying 'one species of quality' but in fact introducing two, state and condition. He says that Aristotle is unaware that he is making condition the single species under which he puts state and the condition which is equivocally named [and

corresponds in one of its senses] to the common feature, just as justice in a more restricted sense and piety are subsumed under justice.[345]

On this point Iamblichus says that there is one common and generic condition, and another which is specific, not because he wants it to be the genus in the strict sense, but calling the common condition the genus. But Iamblichus solves the problem in another way when he says that state and condition together are a single species; for they do not have generic and specific accounts, differing from each other as they do only in terms of duration and being easy or hard to change. That is why they are considered as belonging to the same species, and neither of them is prior to the other. He reminds us of the general description, which Aristotle gives,[346] that sometimes the perceived variation results in another species, sometimes it causes the change within the one species; he does not allow bodily and material differences to count as specific differentiae, but allows only those differences in definition to result in new species. That is why although male and female have many differences, especially in terms of reproduction, even so he is not prepared to differentiate them as species, nor [does he allow that] the white man is specifically different from the negro, nor [allow any specific difference] that is to do with time, for example if certain people who live in the mountains enjoy greater longevity, as the Acrothoitans are said to do, or if marsh dwellers are not so long-lived. For temporal differences do not produce a different species of man, but the same species persists including temporal differences. So in the case of state and condition greater or lesser intensity (*hê epitasis kai hê anesis*) is more to do with the matter,[347] but does not cause any specific differentia. For the indeterminacy of the more-and-less is engendered by the matter. Furthermore expansion and contraction in time has nothing to do with the formation of species, for it does not cause any specific differentia; for the time does not complete the description of the species, but only contributes towards the continuation of its life. Aristotle's text, if carefully studied, solves the problem. For he does not say 'let state and condition be one genus' but 'one species of quality'. Again state and condition are mentioned together as if comprising the same species, and not contrasted as being one in one species, and the other in another. Thirdly he nowhere talks of condition as if it were spoken of in two senses, the generic and the specific. For the interchange between lesser [and greater] intensity, and between short [and long] lived, do not naturally create a genus in such a way that condition can be thought of as a genus. Finally when demonstrating the differentiae of qualities he characterises them by the stable and the long-lasting and their opposites, and he is not prepared to make these into specific differentiae.

Iamblichus says: 'if anyone demands from us the definitions of

generic and specific condition, although in the case of justice we can give one definition of it as genus and another of it as species, we would not be able to point to the difference in the case of condition. For the short-lasting and easily changeable aspects of condition could not be the genus of the longer-lasting and the hard to change, nor is it possible to imagine any other signification which extends equally to the shortlasting and the longlasting.'

At this juncture I think we should note first that even if there is some sort of generic condition, it would not be this that was longlasting but some other [condition] common to both and considered in terms of being in any condition whatsoever. Secondly simply being in a condition would be common to what is stable and what is easily got rid of, just as fair apportionment is purely and simply something common in relation to both men and gods, and we call the former in specific terms justice, and the latter piety.[348] Iamblichus adds that there is one account of condition which Aristotle suggests in the *Metaphysics*,[349] which can be explained in common terms, and this second one which[350] pertains to specific condition. But if anyone were to distinguish the differentiae by time only, he must then discover their generic sameness too, which is impossible. For what common generic feature of shortlasting and longlasting as species could be found merely in terms of the particular feature of time and the existence of the quality which is in it?

Alexander asks the following question: 'what difference is there between this condition and the state consisting in the affections and affective qualities which he will go on to talk about a little later?[351] For when heat is variable, he says it is an affection; but he now calls variability a condition. He says that when affections persist, they become affective qualities; but he now calls affections that persist, and are hard to get rid of, states. In what way then do these states and conditions differ from those affective qualities and affections?' Alexander himself answers the question when he says: 'perhaps we should put state and condition under the qualities of the soul which are acquired, come from outside and occur in us through instruction.' But when Aristotle's examples of conditions – heat, cold, illness and health – are objected to as not being psychic, Alexander claims that Aristotle was using the examples in a more general way, saying 'now the phrase "for example heat" could mean the same as "for example in the same way as heat"; for just as these things are easy to change, so too is a condition.'

First, later commentators do not accept this solution, but find it surprising that Alexander is not in accord with Aristotle when he defines certain states and conditions as being particular to souls,[352] not making them common and belonging to whatever has them. Secondly, why does Alexander not understand states and conditions

to apply to body as well, when certain specific differentiae occur in body? For the white in snow both completes its definition and produces the state of whiteness in it. So unless the state too must be something acquired and not connate, then the condition of permanently bleached flax would be a state in respect of the whiteness.

'But', they say, 'Alexander is doing violence to the examples of Aristotle when he claims that the examples which were properly given in a precise and esoteric treatise were not properly given; he is guilty of misinterpretation of the phrase "for example heat" if he imagines that it means the same as "for example in the same way as heat" in order that we should understand that psychic conditions are easy to change in just the same way that [his examples] are. For these examples are put to the test in what follows, since in his discussion of the states which he himself says are psychic, he says "for example justice".'[353]

So we should not define them in this way, that what is easily changeable in bodies is an affection and what is not easily changeable is an affective quality, while of acquired psychic qualities those that are easily got rid of are conditions and those that are hard to change are states; for in this case we are not dividing the account of Quality itself, *qua* Quality, into species, but we shall be making the differentiation regardless of the substrates in which they occur. So we should rather say that the affection is characterised by change, alteration and dislocation in the substrate, and that the affective quality is like this, when the affective change is hard to get rid of. But it is a condition in that it is already contained in the definition and limit of the form, and is entirely separate from the irregularity and alteration caused by the change. For affective change in particular is the route to the account (*logos*); but when it reaches its form, it comes to a halt and stops being affected and altered. So the same heat, when it changes in the course of an alteration, appears to be an affection and an affective quality; but when it is stable in terms of the form of heat and cold, then it is defined within the form of the condition, and so it results that the difference occurs according to the account of the quality itself, but not according to any external irrelevant additions of what is received or anything else of the sort, since of natural psychic affections some are affections and others are affective qualities, as Aristotle himself will go on to say; we should not exclude these from the soul, and to transfer them to body. So chilling to a certain degree is not a condition, nor similarly is chilling which is at a greater level, and is more stable, a state; rather it is the chilliness and not the process of chilling which is the affective quality. According to this account what occurs is counterfactual. For chilling and warming are a process of change, while the hot and the cold are stable in their forms. So chilling is not a quality of whatever has undergone it, but of what is undergoing it and is being altered; nor is coldness the

affection as it is actually occurring, but that which has already occurred.

Porphyry says:[354] 'Would temporary warming, which involves an affection, be the same as a condition? The heat of a body which possesses it and causes another body to become hot would be a condition, but the temporary and limited heating of the body which is heated in such a way that it could heat no other body is an affection; consequently the condition is the intension of the affection, and this would be an affective quality, while the state and in particular the affective quality would be the intension of the condition.'

Some criticise the division on the grounds that it does not produce a plurality from a unity as it ought, but bundles together a plurality under a single heading, and makes a single species out of state and condition, on the grounds that the one is more and the other less intense, while both remain within the field of the same particular characteristic; they would say that it was possible, and that nothing prevented things that had specific differences from having the difference in terms of more and less; they would produce examples such as criticism, anger and rage, which Theophrastus[355] says in his work 'On Affections' have their difference in being more or less, and are not of the same species. Similarly, friendship and good will admit of intension and remission, and each is a separate species, while fierceness and brutality (in the field of anger), and lust and love, cover a similar range; in general our more shameful feelings are subject to intension and change to another species. If this, therefore, is their claim, the following question must be asked: if the more and the less have their being in the indeterminacy of matter, how could specific differences occur because of nothing other than the range (*diastasis*)? For if the difference viewed in terms of the species were anything else, [the species] would get its definition more from that, and not from just the more and less; consequently also when these emotions are spoken of in the case of affections, as they will be spoken of in the case of enmattered natures, being variations of irrational deviations, [they will not be species], just as the whole is called an inexact cubit,[356] not a cubit and an inexact cubit. Here too there is a difference in the disorderly and enmattered nature, but not a difference in the strict specific sense. For just as there are certain similarities, such as right and left, which in themselves preserve the specific distinction, there are also differences which persist in the same species, like the more and less.

In contrast to this Plotinus[357] presents the following difficulty: 'if it is a common feature of every quality that it is an individual character outside a substance, and something which supervenes posterior to the substance so as to dispose the substrate in a certain way, why are state and condition counted as further species of

quality? For stability and instability are differentiae of something other than quality, but condition, however disposed, is enough to produce quality, while remaining the same is an external addition.' But since stability, being hard to change and continuance in the same species belong to substances or the account of substance, for heaven's sake!, why is it not the case that with qualities differentiae according to these characteristics produce a species of a quality, a species which, within a single species, has some differentia in relation to itself and not some superfluous addition? For the state did not become more stable compared with the condition by differing in some chance way, but by partaking in some unchanging and indestructible power. This is no addition of some specific variation, but a proper differentia of the completeness of the same species, not because conditions are incomplete, but because these too have some sort of completeness of their own which shares in the completeness of the same species. Some things are the same because of condition, others because of state; for state does not absolutely endure in the same thing as condition does (for otherwise it would not be different from it) nor does it absolutely absent itself (for otherwise state would not be condition with some addition), but in a way it is the same as condition, in a way not, in that they both remain in the same species while being distinguished by differentiae.

But they ask why Aristotle earlier puts[358] state and condition in the category of Relatives, and now puts them under Quality. The answer, as has often been said in reply, is that there is nothing to prevent the same thing being put in different categories in respect of different things, especially under Relatives and some other category, since relatives do not exist *per se*, but subsist in other categories.

Some people criticise Aristotle for making condition short-lived, themselves quoting common speech which shows it to be long-lived, just as Aristotle used common speech as evidence in the case of state.[359] At least in the case of irreconcilable enemies and chronic diseases we usually talk about already established conditions. But we ought to reject common speech on the grounds that it does not always coincide with the truth. Only where it does, is it correct to cite it. In this way we are usually prepared to accept condition instead of state, since they are both ranged under the same species. But condition displays some specific situation, while state reveals the activity of the possessor or the possessed; so let the former be unstable, the latter hard to dislodge.[360]

Eudorus[361] objects that Aristotle, having said that being easily changeable is the particular characteristic of condition, then[362] says that states and conditions are species, with the words 'being easily got rid of will no longer be the particular feature of condition; for state too will be easily got rid of; for if rationality were the particular

feature of animals, a dog, being irrational, would not be an animal.[363] If every state is a condition, but no condition is a state, the conclusion is bound to be that states are not states.' In reply it must be said that Aristotle did not say that being easy to change is the particular feature of all conditions; for if one condition is generic and the other specific, then the one that is viewed specifically is the one that is easy to change, while the generic one belongs both to [conditions] that are easy to change as well as to those that are not. This argument too has some persuasiveness if one were to understand condition as a genus or like a genus. But if one were to posit condition as a division of the whole of state and were to prove that it is inferior, again in this way too state will be condition in that it includes condition within itself. For in fact we are even said to be in a particular condition because of our virtues, although these are states.

But since the distinction between items signified contributes in no small measure to the truth, we must distinguish these terms in the light of what has been said, since they present some ambiguity. So virtue is spoken of in two senses by Aristotle, the one being incomplete, which is brought to a good state only by reason, rather than habituation or nature; by the phrase 'only by reason' I mean knowing what is necessary, but not becoming habituated or naturally disposed towards it and thereby saying along with Medea:[364]

> I know what evil I am about to do
> But my passion is more powerful than my judgement.

The other is complete and depends on the three factors;[365] complete virtue is now said to be hard to change and depends on them all. Again, although knowledge is spoken of in a specific sense in terms of the accurate cognisance of things as they really are, while the other sense is the commoner one which is predicated of all art, knowledge has now been said to be that which pertains to the arts. Furthermore, heat is spoken of in two senses: the one connate, the other acquired. In this passage[366] he calls the acquired heat easy to change. Similarly, in the case of chilling we must take coldness as the acquired [kind]. That is why we shall not understand, in that passage, the heat of fire or the coldness of snow [as inherent], but the change of water or some other body from both of these [opposites].

It is also worth knowing what the Stoics[367] have to say about these terms. For some people believe that they hold an opinion which is the converse of Aristotle's, that condition is more stable than state.[368] There is some basis for this belief, not because the difference between the two terms lies in being more or less stable, as the Stoics say, but because conditions differ; for they say that states are liable to intension and remission, but that conditions are not. That is why they say

that the straightness of a rod, even if it is variable so that it can be bent, is a condition; for the straightness could not undergo remission or intension, nor could it admit the more or the less, so it is therefore a condition. In this way the virtues too are conditions, not because of some particular stable feature, but because they cannot be intensified 238,1
and cannot admit the more; but the arts, although not easily changed, are not conditions.

The Stoics appear to consider state as belonging to the latitude (*platos*) of the form, and condition to the completion and consummation of the form, whether there is change and alteration, as in the case of the rod and its straightness, or whether there is none. We should 5
rather consider whether the Stoic term 'disposition' (*skhesis*)[369] is the same as Aristotle's 'condition', being distinct from 'state' in so far as it is easy or hard to remove. But they do not agree even on this. For Aristotle says that unreliable health is a condition, while the Stoics do not agree that health of any kind is a disposition; for it has the particular feature of a state; for dispositions are characterised by 10
acquired circumstances, while states are characterised by activities stemming from within themselves. So the Stoics do not think that states get their specific features from length of time or strength, but by some particular feature and characteristic; just as plants with roots are rooted to a greater or lesser degree but have one single common particular feature – a grip on the soil – so state is viewed as being the same in things that are hard or easy to change. Broadly 15
speaking, many things which are generically qualified have the particular feature according to which they are specified in an attenuated state (sour wine, bitter almonds, and Molossian[370] and Maltese hounds, for example – all of which share in the generic character, but in a limited degree and weakly). The state remains consistently one as far as its actual account is concerned, but it is often easily changed for some other reason. 20

That is why the Stoics commonly extend the term 'states' to things that are easily changed, whereas Aristotle calls these 'conditions', and they think that these differ greatly from dispositions. For the state of someone who regains his health is altogether different from being seated, from being on one's guard and other such dispositions. For the latter have no firm roots or structures, while they say that the 25
former exist in such a way that even when they undergo remission they endure as far as is possible for them, providing that something from themselves and their particular account lasts. That is why no disposition, not even one that is in some way hard to remove, is a state according to them. For if it has from outside itself the feature of being hard to remove, like a thumb[371] in a thumb-screw, it would not be in a state resulting from such circumstances. But if it provides the actuality of being such from within itself, then it would be in a 30

state, like clay which is transformed into pottery; it itself becomes pottery from within itself. So much for that.

One question here that needs closer examination is as follows: is state the same as condition except for the added feature of stability
239,1 and insusceptibility to change? What, then, is this added feature? Is it the addition of a differentia, or of some simple relationship (*skhesis*), or something else of a redundant nature? For if some specific differentia is added, then it has become another species, and state and condition are no longer in the same species. If it is simple
5 relationship or something else of a redundant nature, at any rate as opinion has it,[372] then in such a case it again becomes a pointless addition and the stability is not present because of the particular nature of the account.

So perhaps the accounts of state and condition are viewed within the latitude of the single species, having differentiae within themselves which are specific but embraced by the same species. For the one species includes within itself the differentiae of state and condi-
10 tion. The reason for this is the purity and the immaterial nature of species, because of which many species are often included in a single one in an unmixed and pure manner. In a species we must consider not only the major differentia but also the smallest variation in their being. We must not accept an intension and alteration by which state is derived from condition. For the account does not by nature spring
15 from change and intension or because of alteration; for the unchanging is more of a principle and more of a cause than what is changed, just as what resembles the commensurability of unity is more of a principle and cause than what is subjected to the indeterminacy of matter. For the same reason we shall repudiate those who suggest the absence and presence of structure as a way of distinguishing these
20 same things. For they give a corporeal explanation of species, and produce state by means of [corporeal] alteration; in this way alteration is more important than the established species – which is utterly impossible. For the same reason it is wrong to give the long-lived and the short-lived a place among such differentiae, since time is part and parcel with change, and change does not have within itself the
25 validity of the particular nature of species, but is rather itself defined by that nature.

If anyone were to say that a pre-existing and more complete power for preservation has as a concomitant, with the stable circumstance, temporal steadiness, he might perhaps be saying something in keeping with the supposition about qualities. But since, on some people's
30 definition, it is now said that the difference between them is primarily because of the change in terms of time, this argument has no persuasiveness or truth; for it turns the nature of realities upside down. So not even the incomplete and the complete – if anyone takes these as

sufficient justification for making the distinction – provide an unproblematic way of deciding, since there is nothing incomplete seen in the accounts, at least according to the status appropriate to each; for this is filled out commensurably with the power that each has.

So perhaps one ought to transfer such differentiae to what participate in the *logoi* and are composite, when the deficiency of their own 240,1
nature makes what is complete seem incomplete when in an admixture, and what is definite seem incommensurable, and what is fixed seem changing in intension.[373] So in general let the definition be as follows: we must consider the *logos* that is participated in purely *per se*, even if it is to the greatest degree in something else. So the following questions must be carefully examined: what is present in
the composite because of the *logos* of the form, and what is present because of the nature of the material substrate, and what is present because of their conjoint nature? In answering these questions we especially should not compromise the purity of the form, which we ought to include *per se* in the *logos*. From this the following will be apparent, that state is not condition with the addition of stability; nor is the health, which is easily changed, and which is a condition of the
person who regains it [after illness], the same as the health which is stable and unsusceptible to change, which becomes a state when it is achieved. For we are again in this case transferring the affections of composites which participate to the simplest species of qualities, and we are producing processes in them which vary through the change; such a definition does not seem to preserve what is immediately present in them when it is present, and what is not to hand when it
is not present.

If one took them as being whole and part, one would be wide of the mark. For there could be[374] no such differentiae in these; for how could the difference between [parts and whole] be considered in the case of things without parts? But perhaps what is altered in things with parts and which participate is considered in the same terms as what cannot receive what is without parts in an undivided manner. So
Archytas was rightly content to make what is in a state a species of quality, and he did not join condition to it, nor did he count these as two things since they were neither of the same status in the species which we earlier spoke of,[375] nor were they different. He paid more attention to the sameness of the species and stood by the single species, and Aristotle himself did not deviate from this supposition,
except that he added a refinement by offering as an example their plurality in unity. To begin with he says that[376] 'condition is the arrangement of what has parts either in place, potentiality or form; for it is a sort of position (*thesis*) as the name [condition or] disposition (*diathesis*) shows.' Therefore he there includes all the different positions within a single term; bodily ones because they get this condition

in terms of place, others receiving their position in their predisposition and propensity because of potential, others determining their position as complete states in terms of the form. According to him[377] state is said in one way to be the actuality of what has and what is had. For just as performance is between the person performing and what is being performed, so possession[378] is between the person possessing clothing and the clothing that is possessed, conceived without any differentia, because this is not a quality but is put in another category, that of Having. In another way state is said to be a stable condition because of which whatever is in a condition is in a good or bad one, either *per se* or in relation to something else; for example health is a state. For as such it is a condition which manifests a differentia, which is why it is also a quality. It is furthermore called a state, which would be a part of such a condition. So the excellence (*aretê*) of the parts too is a sort of state. Here too many differences are observed within the unity; for the aforementioned distinctions between states and conditions are preserved, and the completeness in terms of actualisation is added; and the completeness viewed in terms of what is good, both *per se*, and relative, is revealed at the same time; even so they are [all] included in the account of state. But furthermore both states and conditions are each considered in several senses, but are brought together under the single complete account of Quality, since this holds them together within itself.

But we must not for that reason make Quality an intelligible form or one genus of real beings. For Quality does not subsist among the primary genera in the realm of Real Being,[379] nor is it itself real being as the other intelligible genera are, but it is posterior to them and stands below Being. True Substance must have these as concomitants since it is prior to them, and not have its existence from them or be completed by them; for then it would be posterior to Quality. That an individual substance should gain its completion even from a quality is perhaps not absurd, although it has its being before it has quality; anything qualitative comes from outside, while the substance itself has what it has as something substantial.

They are wrong, therefore, to ask further whether the qualities in the Sensible World and those in the Intelligible World come under a single genus. For they in no way are qualities 'there', but all things in that real world are essences, since qualities are to be viewed in terms of the participation of particular characteristics in matter. 'But if intellect down here is a state', they say, 'then state will be predicated in the case of both that and this substance.' The answer is that intellect up there is called a state in a different sense, and we should not liken it to states down here, but rather to the simple and unmixed forms which intellect embraces within itself. There are two sorts of wisdom, the one of the intellect, the other of the soul; the latter is a

state in the soul, the former an essence in the intellect. We should not ask whether Quality is common here and there, with the same name and the same nature. For everything there is divine, self-sufficient, *per se* and self-subsistent, which is why they alone are real beings; there will be no quality common to both worlds. Enough of that; let us proceed to the next species of quality.

9a14-27 Another type (*genos*) of Quality is that in virtue of which we say that someone has the makings of a boxer or runner, [or is healthy or sickly – in brief, anything which is spoken of in terms of a natural capacity or incapacity. None of these terms is applied because we are in a certain condition, but because we have a natural capacity for doing something with ease or for not being affected; for example, one is said to have the makings of a boxer or runner not because of being in a certain condition, but through having a natural capacity for doing something with ease; and one is said to be healthy through having a natural capacity for not easily being affected by chance circumstances, while one is said to be sickly through having an incapacity for not being so affected. So too with 'hard' and 'soft'; a thing is said to be hard because it has the capacity not to be split easily, while] the soft has the incapacity for this same thing. 242,1

He then moves on to the second species of quality, which is predicated of something in terms of capacity and propensity, or as Aristotle himself says, in terms of a natural capacity (*dunamis*) or incapacity. The word *dunamis* has many significations, as has been stated earlier;[380] it is now used to reveal the outcome of natural propensity. This takes two forms: the one when it is viewed simply, the other when it is viewed in terms of a sort of progress through which the propensity is already evident and at hand (for example, in the person who is said to have an aptitude for boxing).[381] That is the sort of capacity that he now takes up, and that is why he added the word 'easily' to the phrase 'achieving something or being affected'. For this is the particular characteristic of a capacity that has progressed, which is rare. For in fact the Stoics, in relation to the arts, allowed only the propensity which is viewed simply in this way, but asserted that a noteworthy proficiency towards the virtues already exists in our nature,[382] which is what the Peripatetics called natural virtue.[383] But perhaps we should consider natural propensity not only in the case of the virtues, but also in that of the arts – both an inconsiderable or even a noteworthy natural proficiency. But we say people have an aptitude for running or boxing even when they do not yet have these skills fully in their possession, but only a propensity which has been

already developed to some extent and makes it likely that they will possess them. Similarly, we call people healthy or sick because of their propensity for health or sickness. Moreover, natural virtues and vices can be classed under the same propensity.

In this species of quality he also put hard and soft because what is hard 'has the capacity not to be split easily' (for among generated things there is no body that cannot be split [at all]), while the soft 'has an incapacity for this same thing', i.e. a capacity for being easily divided.

It is worth pointing out that anything that can have capacity predicated of it can also have incapacity predicated of it. For if what is healthy has the capacity of 'not easily being affected' by chance conditions, and the hard that of 'not easily being divided', then the former has the incapacity for being easily affected by chance conditions, and the latter for being easily divided. Conversely, if the unhealthy has an incapacity for not being affected, and the soft an incapacity for not being divided, then the former has a capacity for being affected, and the latter a capacity for being divided. But because that which is not easily affected is more perfect than that which is, and because the healthy is more in accordance with nature than the unhealthy, Aristotle ascribed capacity to the former of each pair, and incapacity to the latter.

It is not in every case that there are fixed expressions whereby propensity is distinguished from actual achievement. For although in the case of the person with the makings of a boxer and the trained boxer, and the person with the makings of a runner and the trained runner, the expressions are distinct, in the case of the scholar or the educated man the person who has only the propensity and the person who has already achieved some distinction are called by the same name.

This too ought to be pointed out, that even if this species of Quality in terms of capacity is spoken of, even so it is not the name of a quality from which the potentially qualified thing derives its name. For the person with the makings of a boxer is not so called because of boxing, because boxing is the skill of boxing and the person with the makings does not yet have this skill; if we need to indicate these species of Quality, they must be indicated by a description, since they cannot be named; for the propensity for running is the quality from which the person with the makings of a runner gets his appellation, and the propensity for boxing from which the person with the makings of a boxer gets his; in general [the quality is named][384] after the final outcome.

This too is worth noting: that not every capacity, and not every propensity for change of any sort, is itself said to be a quality according to this species of Quality, but only that which leads to the

actualised quality. We should also note that not only are natural virtues,[385] being to do with the soul, included in these natural propensities, but also corporeal virtues, viewed in terms of hard and soft, as well as virtues which are viewed as a composite of these in people with a talent for boxing and running; consequently, all capacities were included.

Having elucidated the text, let us now turn to the objections and their resolutions. In fact, to name the first as a species and to call the second a genus[386] happens to both raise and solve an objection, since it is not absurd to call what is intermediate and neither specific nor generic both genera and species. For what he now enumerates are both species of Quality in a primary sense and genera of their own sub-species which are said to be subordinate. For that reason he quite reasonably calls them both genera and species.

Some challenge Aristotle on the order of the species of Quality. They say that he should first have discussed the natural capacities because of which people have the makings of a boxer or a runner, and then should have explained the states and conditions which supervene on natural capacities as a result of training and instruction. But those who make this challenge should take note of Aristotle's self-consistency. For he himself in the *Physics*[387] says that in nature the complete is prior to the incomplete. For the incomplete is engendered by the complete, and the potential by the actual; for the human, viz. the father, produces the seed, and the human, viz. the mother,[388] in turn produces the human from the seed; for all that is potential is brought to actuality by the actual; for this reason the complete must pre-exist the incomplete, being prior to it in causal explanation. So it was quite reasonable to begin with the discussion of complete entities and then introduce the discussion of capacities. For even if in terms of the coming-to-be of any one thing the potential precedes the actual,[389] and the incomplete precedes the complete, the converse is true in nature at large. For everything that is incomplete is brought to completion by what is complete, and all that is potential is brought to actuality by a pre-existing actuality. So we should understand prior, not in relation to coming to be, but in relation to being. Most of all in the case of qualities does the actual pre-exist, where the characteristic to some extent includes the definition in actuality. The present order of the species of Quality is appropriate in a different way too, since the natural capacities are viewed in terms of propensity, and propensities are intermediate between fully actualised realisations and the affective states which he proceeds to explain. For the agent must first exist in actuality, and then that which by its nature is affected; in this way, the affection proceeds from the actual to what is by its nature affected.

Plotinus asks the following question:[390] 'In what sense do natural

capacities form a second species? For if qualities exist because of capacities, "capacity" does not correspond to every quality' as something which is included in one species of Quality. In reply it must be said that although capacity has been shown to apply to all species of Quality, and extends to the whole genus, even so capacity is spoken of in several senses, or at least two; he has defined one species of it, the one seen in terms of full realisation, and he quite reasonably contrasts with it another species, seen in terms of a not fully realised propensity which is conceived of in terms of potentiality. This itself is considered in two senses: one in terms of the propensity which happens to be present in more or less everything, the other in terms of the propensity which has already made some natural progress, the very thing that belongs to those who are good with numbers.[391]

Plotinus goes on to say:[394] 'But if the person who naturally has the makings of a boxer is said to have the quality through being in a certain condition, the capacity is something added and in no way produces the quality; for capacity was found in the states and conditions defined.' In reply it must be said that as far as being qualified is concerned, it makes no difference whether the source is a state, a condition or a natural propensity since generically qualified is viewed commonly according to the genus of Quality. But for the species and differentiae, the difference lies in their being a result of nature in addition to being the result of either their pre-existing state or disposition. But now he proposes not to speak about Quality simply, but to enumerate the species of Quality, and not [to speak] about the qualified, but about something qualified considered in terms of a natural capacity, a potential and propensity, but not [considered] in terms of state and condition.'

Plotinus goes on to ask:[393] 'Why will [the person who has acquired a quality] because of a capacity be different *qua* qualified from someone who has acquired it by knowledge?' The answer is that in that they have a quality, they will not differ from each other; for the genus is present to them both equally. But in so far as they are allocated species of different qualities, they will differ in this respect. For in all other specific cases specific differentiation is included in specific differences within the species and not in generic common features. Plotinus adds:[394] 'But these will not be differentiae of a quality if one person has it by training, and another by nature. No; the differentia is external; how could it occur because of the very form of boxing?'

In reply it must be said that progress which results from training and leads the natural capacity closer towards a realisation of the form in general has present, at the completion of the process, a state which is different from the natural predisposition; for the one is complete, the other incomplete, just as the bronze which is suitable for making

into a statue is to be distinguished from the actual statue; for this is how the person with the makings of a boxer is distinguished from the actual boxer. But in the case of qualified things resulting from art and natural capacity the names are distinct: the one is called a boxer, the other someone with the makings of a boxer. In the case of the art and the natural capacity themselves, the names are the same; for both are called 'the boxer's' because many things go without their own name even if there are separate forms, the one incomplete, the other resulting from training and skill. That is why Aristotle did not think it correct to say that what possesses a quality potentially is in a certain condition. For he says[395] that a thing is not said to be potentially something 'because of a certain condition', not because they are not in a certain condition according to the commoner meaning of the word 'condition', but because they are not in a condition in the way that people are who have achieved perfection by practice. So 'being in a condition as a result of natural capacities' will be an equivocal phrase, using almost the same terms not from the quality that they have, but from the one they will have. If this is so, then some distinction between them can be conceived because of the very account of Quality, and the addition of the potential to states is not thought of as something external; rather, just as the complete [is distinct from] the incomplete, the undivided from the divided, and that which is proceeding to participation in the forms from that which is viewed, conversely, as subsisting in participation in the forms, in this respect they are distinct from each other. So much, then, in reply to this problem.

I think it is also worth asking how the incomplete and the complete are distinct from each other in form. If it is because the incomplete is incomplete not only because of a natural propensity, but also because of an alteration from that and a progression to the perfected form when viewed in terms of a change towards a form, then there, too, will be a specific differentia. But how is it possible, generally speaking, to make what is incomplete another form? First, the form is always viewed in terms of completion; for when we are making a division, we say that the species of living creatures are man and horse; secondly, the forms will be doubled in number in this way, and for each form there will be one complete and one incomplete. So perhaps one should understand such difference not as between incomplete and complete, but in terms[396] of what is included in the same species; and one should not put the propensity and the potential in a separate species characterising them by what they will have, but because what is potential and what is qualitatively incomplete are the same [characterising them by] being placed in a determinate species according to some appropriate qualitative completeness. For propensity is to some extent included in the definition,[397] and is not viewed in terms

of its progress to the form. For it is indeterminate, lacking limit, and unable to be defined according to a form. But the propensity in bronze for being made into a statue is a sort of definition and a form which is inherent in the form of the bronze. That is why it is a quality and whatever has it is said to be qualified by it, even if not brought to full actuality.

Others who accept this natural capacity as potential in matter ask in what way the capacity is a quality of qualitiless matter. Yet a natural capacity is one thing, the potential in matter another; for the one is a foreshadowing of the form, the other a privation and not yet a propensity, still lacking even that. We should remember that Aristotle said that the capacity which is already led into acting or being acted upon easily is natural.[398]

Eudorus is critical on the grounds that this species of Quality is the same as the former. He says: 'if natural capacities happen to be easy to change, they will be conditions; if they are stable, they will be states.' But this is wrong; Aristotle included virtue and knowledge among the former, and even if these have something natural about them, they still need teaching and instruction from outside; but among the latter he put things that need no teaching but which depend entirely on nature. So both sets are distinguished, the one by its actual completeness, the other by its predisposition (*paraskeuê*) to propensity.

They say[399] that this too is worth noting, that perhaps he collected together many different things and brought them all under this single species of Quality. For since some capacities consist in acting, others in not easily being affected, the former quite reasonably can remain secure in being capacities, while the latter, since they are considered in terms of affection, should rather be seen as incapacities. So why should we put these very different things under one heading, and count incapacities alongside capacities? Why did Aristotle designate things qualified in this way[400] 'in terms of capacity and incapacity'? For one would be receptive of contraries in the same respect [as the other]; for capacity is the contrary of incapacity. The answer is that the contrariety is not of the same thing in relation to the same thing, but between different things. For the incapacity is not for the same thing that the capacity is for; the capacity is for acting, the incapacity for being acted on. This is necessary; for whatever has a capacity for something must have an incapacity for the contrary; these things are not separable, but meet in the same thing, distinguished only by terminology and reference to differences of conception. For the person with the makings of a boxer would have a capacity for punching, and, being himself hard to punch, can avoid being punched and so would have an incapacity for this. Yet I think it should be said that acting and being acted upon are put under one and the same predication

(*katêgoria*), and that there is nothing to prevent capacities and incapacities, which are to do with acting and not being acted upon, from being like that; for states and their privations are in the same categories. The capacity for acting and not being acted upon is found in the healthy person, while the incapacity which consists in not acting but being acted upon is found in the sickly person.[401]

But why does Aristotle say[402] that people are said to have the makings of a runner 'not because of being in a certain condition, but because of having a capacity of acting easily'? For it is absurd to suppose that they are not altogether free of any condition; for they have the condition of being disposed in a certain way. The answer is that they are neither disposed in terms of the condition of the perfected form, nor in terms of having a changeable or a stable condition, but they are disposed in terms of propensity. So they are not said to have a condition in that sense of the term. Or else we should by preference say that in general such a form is not characterised by being in a certain condition, even if it happens to be entirely so, but because it has the propensity for acting and not being acted upon easily.

But if the person with the makings of a boxer is qualified,[403] why will the person able to act (*ho poêtikos*) not be qualified according to this argument? Why does the agent seem to be a relative? The answer is that if the agent is spoken of in terms of potential, what is viewed in terms of potential would amount to a quality in the second species of Quality, for example having the makings of a boxer. But if it is spoken of in terms of actualisation, in so much as it puts the soul in a certain condition, it would be a quality and will be put in the first species of Quality – but in so far as it is active, it will be classified not under Relatives but rather under Action. In the case of lifeless things not their own tendencies, but those of what comes from outside, complete the outcome (*to suntukhon*) of whatever they seem to produce.[404] The easiness is not the common propensity, as said above.[405] For this does not yet possess effortlessness in performance, but that which has forward progress does possess it. This is receptive of the complete *logos* before the perfected form, having seized, as it were, a part of it and not yet possessing the whole.

But why did Aristotle say that it is an incapacity, not a capacity for not being affected? The answer is that he himself in the *Metaphysics*[406] resolved the problem; he made a distinction between actions and affections, and defined action as [action] in something else or [in itself] *qua* something else, and affection as being affected by something else or by something [in itself] *qua* something else. However, in the more general usage capacity also extends to both of these; but he accounts for incapacity more particularly in [the category of] affection. But why does he put incapacity within affection? For if one were

forced to put the converse, that the capacity for being affected is the incapacity for acting, just as the capacity for acting is the incapacity for being affected, he will be raising a matter for dispute. The answer is that although in common usage these terms are interchangeable, strictly speaking capacity applies to acting and not being affected, while incapacity applies to being affected. Capacities, first and foremost among which is Nature, are for something better, while incapacities are for what is worse. But if incapacities are privations, and privations cannot be had, why does he say 'we have incapacities for being affected'? The answer is that it was somewhat a misuse of language to say 'to have an incapacity'; he should have said 'to be deprived of the capacity'.[407] Now since incapacities exist alongside capacities (for health has the capacity to cause healthy conditions and the incapacity to suffer unhealthy ones), it is not absurd for incapacities to be had, since they co-exist alongside capacities. But why does he define softness as the incapacity not to be divided? For an incapacity is a privation, while softness is a form, just as hardness is. The answer is that the same thing can be viewed both as a form, when understood as the easily divided, and as the incapacity for not being divided.

After the objections and their rebuttals I think it would be an opportune moment for me to record the more intellective[408] views of the commentators on the question of this natural capacity, explaining just what it is, and where it is to be viewed in the scheme of things. Broadly speaking,[409] it is the general characteristic found in all things that reach completion in any way at all. For there is nothing at all that moves from incompleteness to completeness without the presence of some intermediate capacity which brings the defective to fulfilment while deriving completion from what is most complete. It bridges the gap between the extremities and points the way from deficiency to betterment; it produces a predisposition and a starting point on the way to fulfilment; it receives a sort of advance payment from the actualisation, and is, as it were, an enlightenment from the completed essence and state, a sort of previous warming of the wick before the heat of the flame; such a capacity should be thought of as a partial participation in the form divided off proportionately, not present in its entirety. Being of this character, it is to be viewed in
249,1 souls which are divided. For when the intellect in the soul is brought to completion by what is separable, it is a capacity which leads the intellect in the soul to the intelligible form and to actualised thought.[410] It is particularly apparent in Nature;[411] for the works of Nature are subject to change, which travels from this potentiality towards full realisation; they are subject too to the participation in the *logoi*, which occurs only in that which has the ability to receive it; for not every form comes-to-be present in anything whatever, but only that which can be instantiated in that which has the propensity to

receive it. In the soul too potentiality is to be viewed just in so far as it comes into contact with Nature and departs from actualised intellect.

So it is correct to say that this capacity completes the substance of Nature in a different way, and that is why in this passage it is quite reasonable for this generalisation to define the second type of Quality as natural capacities, since this capacity is strictly defined in nature, and 'the other' is not conceived of in any other way than just what it is to be the other. In the whole cosmos, if any coming-to-be proceeds, it proceeds and is completed in no other way than from capacity to substance; alternatively, the form is instantiated in matter by being received into it through its capacity; either the capacity is capable of going forward by itself, as is the case with self-moving souls, or it is easily led forward to completion by the actuality. Being like this, and being in things like this, capacity has obtained its own substantial existence.

It would be more systematic to investigate the various doctrines about such a capacity seen in terms of propensity, whether it is considered to be found naturally in qualities, or in substances, or in any other different type of entity. Do what is in potentiality and potentiality itself derive from matter, as some think, or is what is in potentiality matter itself, as others think? Now that is absurd; for matter gives no cause from itself, being weak in all respects; an exile from real being, it cannot yield substantial being; it is entirely impotent and cannot yield even the beginning of potency; it is lacking in all quality and cannot of itself yield the starting point for quality; it has no productive power, being in itself bereft of everything, subsisting in want and poverty.[412] Potentiality is not a disposition (*skhesis*) of matter,[413] which is entirely without disposition (*askhetos*); nor is it a surplus production of the primary substrate which has no internal differentiation; nor is it an expansion or a contraction, a rarefaction or condensation, of matter, which is bereft of all change; none of the other things which are conceived of as having to do with matter is the cause of the existence of capacity. This capacity is to be considered as a foretaste of the form, not a disposition of things lacking in quality. But in fact not even the form, in so far as it is a form and rests *per se* in its own completeness, would bring in capacity to this entity; for the form is complete and entirely self-subsistent, 250,1 and is prior to capacities which gain their existence from the fragmentation of forms. So the upshot is that capacity gets its existence from the combination of these, i.e. matter and form, or from what is analogous to matter and form. So capacity exists in matter as a result of the form, because of participation, somehow or other, in the *logoi*, when some propensity runs out ahead of them, so the participation is the reception of the state, and the reception of the state conducts

it forward into actualisation.[414] Whether it is body or soul that receives this propensity, they all preserve the analogy to matter according to which each has a propensity for something more complete than themselves, as directed towards the form, viz. for a more complete participation, because of their own primary being. For things that are in a state of coming-to-be, and are progressing from the incomplete to the complete, receive the progress which is in the reception of the state, and are then apportioned a more complete participation; they keep receiving a succession of participations, the less complete before the more complete; that which is participated in endures, while that which participates cannot receive the form in its entirety at the same time but it receives a less complete form before the more complete one. Let us consider this propensity, which derives from capacities of the body which are intellective and purely bodiless, by analogy with the case of living creatures. So it is clear from these that they are inherent in the soul, in the body and in the compound living creature, and it is clear how both in action and in being affected or not being affected they are to be viewed in this way simply because of some common participation. In fact their inclination in both directions – towards capacity and towards incapacity – is easily apparent from the same source; for because substrates with the status of matter are mixed with the fragments of the *logoi*, the portion that comes from the *logos* is ambiguous, inclining equally to capacity and incapacity. All the other statements usually made about the natural status of these incapacities are obvious to those who investigate them with scientific accuracy, since change is viewed in terms of natural capacities; for they are viewed as conducting and travelling to completeness. The more and the less belong among these capacities because propensities of nature are always going forward.

It is worth noting that perhaps these [viz. the more and the less] occur primarily in compounds and in what participates in capacity, while the capacities themselves suffer no such thing; for they already have some degree of participation (*metousia*) from the forms. Now it is rather the case that what shares in capacities is *per se* impotent and does not admit any change or advancement towards the more complete, but it has these because of natural capacities, which because of material deficiencies and a yearning for the complete form, give advancement to what participates in them, alteration towards the complete, and change according to the more and less, gaining their definition because of the change more in terms of the vital than the formal aspect of the *logoi* that are participated in.

Pursuing the same train of scientific accuracy, we must also give an explanation of the hard and the soft, showing how these were produced in the first place; is it separation of parts (*diastasis*) – the one denser, the other looser – and condensation and rarefaction (the

taking in of much void) which produced the hard and the soft? When does compression and replenishment of a vacuum cause a difference in each case? When does a surplus of matter produce the hard, and lack of it the soft? The answer is that all such things produce the supervenient particular features in things that differ in account. Is it then the case that as the capacity wanes and cannot sustain itself, the corresponding hard quality comes into being, while the quality of softness, when the capacity does sustain and lighten itself, in this way buoys it up and makes its existence more tender? But in that case the contrary to Aristotle's intentions would occur; for it will no longer be the case that the hard will exist because of a capacity and the soft because of an incapacity, but the contrary; lightness, able to sustain itself, will have the capacity to raise itself, while hardness will have the incapacity to do the same. So it is better instead to account for the difference between them in terms of excessive or deficient cohesion. For other cases fit in with this, both for hardness to be said to have a capacity not to be easily divided, and softness to have an incapacity for the same. For that which is hard to divide and that which is easily divided are what they are because of the excess or deficiency of the cohesion. One could give the same account in terms of the greater or less control over the form, defining hardness as that which has a tighter grip on the form, softness a looser grip.

Perhaps each of these is brought to completion by different *logoi* and a complete antithesis of forms, like hot and cold, sweet and bitter, dense and rare. For if everything which is according to nature has a complete hold on its appropriate form, and if some things are soft according to nature, like some entire living creatures and plants, and, among the parts of a living creature, the lung, how could the soft be defined in terms of a deficiency in the form? Why then does Aristotle view the soft as an incapacity not to be easily divided, just as he views sickness as an incapacity not to be easily affected by chance circumstances? For sickness obviously exists because of a privation and deficiency in the form, and not because of a contrary form. So perhaps a twofold type of incapacity emerges from all this, one in terms of privation; for example sickness has an incapacity for not being easily affected by chance circumstances, while health has the capacity for this; the other type is in terms of the form; for example the soft has the incapacity not to be easily divided just as the hard has the incapacity to be easily divided; the soft is defined in a worse light in the antithesis because of its incapacity.

So are we to say too that the healthy has the incapacity not to be easily affected by chance circumstances? The answer is that no one would call what is present through an excess of capacity an incapacity; for it is not absurd that the hard, in that it does not have what matches up to the soft, which is a form, should have an incapacity for

the contrary; but health, not having the properties of the unhealthy which exists by privation, could not be called an incapacity. Whatever the case, it is clear that capacity and incapacity are for the same thing; for the hard is the capacity for not easily being divided, and the soft is the incapacity; in my opinion the converse is also true – [the soft is] the capacity for being easily divided. Aristotle did not fortuitously put such examples at the end of the list of such capacities, but because he wanted to demonstrate their rank, that being the last of the capacities in nature they have had the last of entities allocated to them.

9a28-10a10 The third type of Quality consists of affective qualities and affections, [such as sweetness, bitterness, sourness and anything akin to these; also heat and coldness, whiteness and blackness. So it is clear that these are qualities, since things that have received them are said to be qualified because of them, as honey is said to be sweet because it has received sweetness, and a body is white because it has received whiteness; so too in the other cases. They are called affective qualities not because what receives them is itself affected in any way (for honey is said to be sweet not because it has been affected in any way, as is the case with other such things); similarly, heat and coldness are said to be affective qualities not because what receives them is itself affected. But they are called affective qualities because each of the qualities mentioned causes an affection in our senses; for sweetness causes an affection in our sense of taste, heat in our sense of touch etc. Whiteness and blackness and other colours are not called affective qualities in the same way as the above, but because they occur as the result of an affection. So it is clear that many changes of colour occur as the result of an affection; for when you are ashamed, you blush; and when you are frightened you turn pale etc. Consequently, if it is as part of his natural make-up that someone has undergone one of these affections, it is likely that he will have a similar complexion; for the very same condition which now occurs in his body as a result of feeling ashamed could also be part of his natural constitution, so that it will be as part of his natural make-up that he will have a similar complexion. Therefore, any such occurrence that has as its starting point an affection that is hard to dislodge and is stable is called a quality. For if paleness or swarthiness is part of one's natural constitution, it is called a quality – for we are said to be qualified in virtue of them; but whatever occurs as the result of anything easily removed, or quickly dispersed, is called an affection, and we are not said to be qualified in virtue of it.

For the person who blushes in shame is not said to be rubicund, and the person who turns pale with fear is not said to be pasty; rather he is said to have suffered an affection. Consequently, such things are called affections, but not qualities.

Similarly, affective qualities and affections are spoken of in the case of the soul. For anything that is there at the moment of birth as the result of an affection is called a quality, such as frenzied madness, bad temper etc. – for we are said to be qualified in virtue of them, e.g. bad-tempered or mad. Similarly, bouts of madness that are not natural but result from other circumstances and are hard to shake off and very hard to get rid of – these too are qualities. But anything that results from what is quickly dispersed is called an affection, for example if one is a bit irritable through distress; for a person who is a bit irritable in the course of such an affection is not said to be an irritable person, but rather to have suffered an affection.] Consequently, such things are called affections, but not qualities.

He again says 'the third type of Quality', using the word 'type' (*genos*) instead of 'species' (*eidos*); or else he is using the word *genus* in its strict sense; for even if it is not the highest *genus*, as pure quality or pure accident are,[415] it is still a *genus* in that it can be divided into its own species, and a *genus* consists of what are called subordinate genera. He divides this third *genus* into two, affective qualities and affections, whose common features are (a) the qualified (in whatever way, for what possesses either of them is said to be qualified) and (b) affection; but the affection is seen as a common feature differently in each of the two of them, either as causing an affection to the senses – as sweetness causes an affection to our sense of taste, and heat to our sense of touch – or as arising out of an affection – as paleness in those who are afraid, and blushing in those who are ashamed. But there is a particular distinction between affective quality and affection, which Aristotle proceeds to make. [He says]:[416] '[those states] 253,1
that have their origin in affections that are hard to change and are long-lasting are called affective qualities' just like[417] natural paleness or swarthiness or [the complexions] that result from chronic illness or constant exposure to sun; for these latter people are said to be pale or swarthy like those naturally swarthy. But '[those conditions] that result from what is volatile and quick-changing'[418] such as the pallor that is caused by fear or the reddening that is caused by shame' are affections, and those who partake of them are in a way qualified just in so far as they have been affected. At least, we say that such people blush or turn pale, but not that they are qualified; for these are qualified affections. Therefore we do not even say paronymously that such people are pale or rubicund, but only that they have been

affected; for because they have gone pale or blushed they do in a way partake of quality, but not because they have become qualified in these respects. What happens in the case of the soul is analogous. Irascibility and gentleness, which occur naturally as part of a state, are said to be affective qualities; for we are qualified in respect of them – those who possess them are said to be irascible or gentle. But conditions that occur as a result of something short-term are affections, as in the case of the man who is irritated by something distressing; such a man is not said to be irascible, but merely irritated.

So much for the text. However, one might now ask this general question: why is it that, whereas he formerly characterised[419] condition and state by the variable and the stable respectively, he now distinguishes between affections and affective qualities in the same way? Certain points were made [in my commentary] on that passage[420] in relation to this question, that there Aristotle presented states and conditions as being what resulted from instruction and were imposed from outside, being outcomes that were hard and easy to change respectively, while here he presents affective conditions and affections as natural. In case anyone finds this unconvincing, it should now be concisely pointed out that heat (a) in that it puts the substrate into some condition, is called a condition; but (b) it is called a state when [the substrate] has the condition as something stable; (c) when it results from some agent which occurs superficially it is called an affection; (d) when the affection is ingrained and lasting it is called an affective quality.[421] Both the latter are considered as affective in that they result from an affection or cause an affection in one of the senses. The affection is to be considered as occurring in them in both respects; consequently if heat is short-lived it would be a condition of the body that possesses it and passes it on to another, but it would be an affective quality of what is heated in such a way as to now possess the form of heat but be unable to pass it on to anything else. But if it is viewed as the occurrence of the form[422] it is an affection. So even if Aristotle employed the same terms – the stable and the variable – they did not have the same signification.

But why does he say that affective qualities are those which are natural, characterising them by some accident (e.g. their causing an affection in the senses), and further, not as qualities pure and simple, but rather as substances, since they are parts of substances, and parts of substances are substances? The answer is that according to the account (*logos*) itself, the form and the substantial participation, one should not call the heat of the fire an affective quality, but part of a substance; what should be called the affective quality is the qualification (*poiôsis*)[423] which results from it in bodies. There is ample evidence of this: the forms of substances are not coupled to the sense-perception and do not move it; for the sense is not apprehensive

of substances, for reason scarcely apprehends them; but the qualifications (*poiômata*) resulting from the *logoi*, which the body is naturally equipped to receive, move the sense, and proceeding in division from them different senses are differently disposed. So because of this we call 'affective qualities' the affections[424] which are coupled to the sense in such a way as to move it as a result of acting on it, and because they have their own natures akin to the affective movements of the senses.

Some people make an objection, asking why honey is said to be sweet by having received sweetness; for it would not be honey at all if it were not sweet. How then can it receive what it already has? In fact, Aristotle himself showed what he meant by the subsequent example, when he said[425] that 'a body is white because it has received whiteness'; so honey as body has received sweetness. But having said[426] 'as honey is said to be sweet because it has received sweetness', why did he add[427] 'for honey is said to be sweet not because it has been affected in any way, as is also the case with other such things'? For if it had received sweetness, in what way was it not affected by it? The answer is that the honey received sweetness which caused an affection in the sense of taste, but was not itself affected by the sweetness, but had it according to its essence (*kat' ousian*). The particular feature of an affective quality is to be able to cause an affection in the senses with no effort on our part; it occurs in the substrate[428] either by means of an affection or without any change and alteration. They are called qualities as a result of what possesses them and are said to be qualified because of them – at least if it is a quality because of which each thing is said to be qualified. They are affective because they have the additional ability to cause an affection in the senses.

But why does he say:[429] 'Whiteness, blackness and other colours are not called affective qualities in the same way, but because they occur as the result of an affection', in fact, they too act on the senses, causing division and combination in the sense of sight?[430] Other qualities occur as the result of an affection; for bodies which are set in motion become warm, and the man who is embarrassed blushes. The answer is that when we perceive white, something in us becomes white, but not in the way that we become warm when we perceive something warm;[431] for when the eye takes on the form of white it does not become matter to the white in the way that the hand is warmed by something warm; the eye is affected in some way, but, of course, it does not become white. That is why even if Aristotle elsewhere says that the sight is affected (this is confirmed by the fact that when it apprehends what is most visible it cannot apprehend the less visible, but still seems to see the latter in that it still has residual traces of them),[432] so even if he says this elsewhere it does not conflict

with what he says here; for here he is considering a way of differentiating between affective qualities, with some allowing participation in the same quality, others not. But if all affection occurs through a change, and if all change is in time, then anything which is being affected would be being affected in time.[433] If then the act of seeing appears to occur outside time, it would not occur coincidentally with an affection. The answer is that Aristotle seems to say that touch too is outside time, and, at least according to this argument, heating and chilling will be affective qualities not in the sense of causing an affection but in the sense of happening through an affection.

Perhaps it is not only in the case of colours that it is true that the sense is not qualified by the same quality, i.e. our sense of sight does not become white or black; nor does our sense of hearing become high or low. But colours put our sense of sight into a certain condition, just as each of the other sensibilia put the corresponding sense into a certain condition. Even so, colours seem to have the particular feature of inherently supervening on other things; for, in fact, where colour is inseparable, as in the case the whiteness of snow, it is not simply essential but also consequential (*epigennêmatikos*) – if, that is, snow consists in the freezing of vapour through an excess of cold, and the whiteness is an affection and concomitant of such a freezing. Similarly paleness and blushing are concomitants of the psychic conditions in those who are afraid or embarrassed; in the case of the former the blood retreats to the heart as to its own origin and is no longer visible on the surface, which produces the paleness, which happens when one is starved of blood for other reasons too; we blush when we are embarrassed, and on this occasion the blood comes from the heart to the surface and so to speak eclipses the governing faculty and darkens the mental embarrassment that comes over us because of shame. So when a particular concurrence of properties occurs in a woman while she is still pregnant, for whatever reason, a particular complexion naturally occurs;[434] that is why from birth different children are of different complexions, and consequently all qualities of complexion are quite reasonably said to occur as the result of an affection and are accidental properties. In fact, whiteness occurs in snow, and blackness in crows, because of some preceding affection which belongs to the natural composition. No one should imagine me to be claiming that this preceding alteration and change produce colours; but the *logoi* of the colours remain static in nature, while the things that change (by reason of the aptness of the alteration to the *logoi*) partake of the *logoi* and are endowed with form from them. For the *logos* which is static is one thing, and the substrate is another (both these are simple), while the combination of the substrate and its participation in the *logos*, in which the alteration and the affection are to be seen, is yet another; for what is simple cannot *per se* be

affected. So it is not the alteration which produces the colour in people who go pale or blush, but the particular feature of blood, sometimes retreating inwards, sometimes coming to the surface, which causes colour. So even if he says that colours are the result of affections, he does not mean anything except that bodies become suitable for the reception of such colours through affections.

Eudorus asks the following question:[435] 'Why, when discussing the first species of Quality, did he list warming, chilling, disease and health among conditions, while here he ranks them under another species, affective quality?' Our reply will be that in the former passage[436] he took them as conditions in terms of being in a particular condition and disposed with respect to warm and cold, whereas here affective quality is viewed in terms of ability to cause an affection in something else. Nothing prevents us from putting the same thing, considered in different respects, in different species; for example Socrates *qua* man would be Substance, *qua* father he would be Relative.[437] So warming, too, in that it puts the substrate into a certain condition, would be a condition; but in so far as it warms our sense-faculty, it would be an affective quality. In another way, too, the same thing could be in different species, since the condition is viewed in terms of its particular feature and character, while the affective quality is viewed in terms of the lasting alteration caused by the affection.

But why, in the former passage,[438] did he call momentary changes conditions, while here he says that they are affections and not qualities? The answer is that of things easily altered some changes are conditions, which for that very reason are both qualities and bear the distinctive feature of the conditioned, while others are easily removable changes, which are seen only in the case of affections. That is why they are called affections, not deemed worthy of the appellation 'quality', since what is affected is not said to be qualified because of them. So it is nothing remarkable that the one is ranked under Quality, the other not.

It is again worth considering why he put affections under Quality since he says, 'The third type of Quality consists of affective qualities and affections', whereas he later says 'such things are called affections, but not qualities'. Some people think that the phrase 'but not qualities' was used elliptically, and that he omitted to say 'they are not affective', since they are qualities, but not affective. Others think that he meant 'affections' and 'affective qualities' to refer to the same thing, although they are clearly distinguished in this respect. Perhaps it is because the affection is subordinate to the affective quality because of some short-lived property of it that he says the one is subordinate to the other in this way.

Alexander does not think it worth asking whether affections are to

be put under Quality. For Aristotle himself put in the same species not only affective qualities but also affections when he said 'the third type consists of affective qualities and affections'. Now it would hardly be sensible to have them refer to the same thing when he is about to explain the difference between them. For by means of them he distinguishes between a species of Quality and the affection; so it too is a quality. For the names of the genera belong to the species. But it is clear that simply to say that 'affections are qualities' is in obvious conflict with Aristotle's wording; for he says 'consequently such things are called affections, but not qualities'. But to divorce affections entirely from Quality is itself in conflict with his statement that affections are one type of Quality. But it is obviously ridiculous that 'affections' should mean the same as 'affective qualities', and Aristotle clearly does distinguish between them. So perhaps an affection is not an affective quality *qua* quality, although it is akin to one; for it is not possible to think or speak the term 'affective quality' without the word 'affection'. For in a way an affection seems to be an incomplete species of affective quality, and its completion is the affective quality. So just as 'condition' was interwoven with 'state', so here too he yoked 'affection' to 'affective quality'; for just as condition proceeds state, so an affection is a sort of presupposition for an affective quality. Therefore in so far as things that are incomplete are prior, and the process is from them to what follows, he does not dissociate affections from qualities; but because an affection falls short of the completion to be found in affective qualities both through the name and the permanence of the forms, he separates the one from the other.

Aristotle says that just as colours which last only a short time result from an affection, so those which are long-lasting result from just the same thing; Nicostratus' followers think that it is illogical that all colours – particularly those that are connate and essential, like the colour of snow – should result from an occurrent affection.[439] For in the examples of fear and embarrassment he presented the affections as supervenient, and so he seems to have the same opinion in all cases. The solution is that if in the case of bodily fluids, whatever form they take when they reach the surface, the colours follow them, appearing to be like them, and the fluids are altered by the affections, it is also quite reasonable to suppose that the colours follow the alterations or the qualified mixture of bodies. But he does not say that connate colours, like the white in snow, supervene from outside; but if anyone were to think how the primary constitution of snow came to be in the first place, he would discover that its bodily element and substrate took on such a colour because of an alteration of such a kind and a mixture of such a kind. One could realise this also from the evidence of the visible world; for just as visible colours are assimilated to the qualified mixture of bodies, so in the case of other things, even

if they occur naturally. There are some who deny that these connate qualities are affections or affective qualities, but say they are parts of substances or substances. So it is clear that these people do not even in the first place accept the doubts about connate colours.

Andronicus does not think it correct to divide affective qualities into those that cause an affection and those that result from an affection, but says that all of them are affective in that they result from an affection, and that to be productive of an affection is accidental to them; for he says: 'the warm can warm; but in so far as it acts on other things we call it not qualitative but productive (for example, not 'warm' but 'warming'). And this is thereby a relative, just as what burns is relative to what is burnt, etc. Therefore the warm exists even if there is nothing that is warmed, but the warming does not. For qualified things are spoken of in terms of being in a certain disposition, not in terms of being relative.' This is a reasonable doubt, and in answer it should be said that affective qualities that are to do with our senses should not be considered in so far as they result from something acting or being acted on, nor in so far as they are spoken of in relation to what correlates with them; rather we should think of the pure and simple form of the affection *per se* as a quality, not attaching any activity of, or pairing with, what acts on it. For this form is a quality which is separated from things that are relative; it is a form other than what receives the affection, something perceptible and assimilable to the affections which cause it, which is why it is distinguished from the affective qualities that result from the affection.

The following is the sort of objection that is brought against what has been said: the fact that affective qualities cause an affection or even result from an affection manifests only a relationship in that they result from something, or act on something, and does not explain just what affective qualities are. In reply we shall say that an affective quality does not depend on a relationship, but that this supervenes in some other way, while the particular feature of the affective quality is viewed in terms of the change itself, not an essential change (for that does not belong to the realm of quality), but inherently supervenes on it subsequent to the pre-existence of the substance, just as the quality supervenes on substance. So much for the difficulties. 259,1

This third type of quality differs from the first ones,[440] as Porphyry and Iamblichus say, in that the first gain their completion from instruction, while the third subsist by nature. But perhaps those that exist by nature have been subsumed under the former, such as warming and chilling etc., while the difference in one case is that of affection, and in the other of condition and state. They differ from the second ones in that the second ones are viewed in their capacities and

are propensities, while the third ones are full realisations, rather, and already exist in some form.

If anyone needs to understand their order, it should be said that [qualities which consist in] the creation of forms out of affection and change fall short of those which are primary and self-subsistent, i.e. those which are in actuality, and those which consist primarily in a natural capacity or in alteration through movement. But Archytas seems to put the affective species of quality before the capacitative one; perhaps this is more logical in that what is actual must proceed what is potential, whatever it is.

It should also be known that Archytas characterises this whole species of Quality as basically being affection and represents this as its common element, at the same time including affective qualities and affections in a common definition (in this way avoiding many of the problems) and capturing their nature precisely. For this species of Quality is not purely one of matter and body, nor does it stand firmly on the side of form, but it seems to be some sort of intermediate nature between body and form; it resembles bodies in that it is affected, but in that it becomes a form as a result of the affection or takes on a shape within itself from the form, in that respect it is akin to the form (*logos*).

It is clear that some change and alteration can be observed in the case of such qualities; for this much is evident. But the following thought is worth considering: perhaps a change of a certain kind is not the cause of a quality of a certain kind, but it itself provides a *logos* of the necessary conditions, while the form (*morphê*) observed in it is what strictly produces the quality. For motion at the material level pre-exists and helps the prior cause, which is the portion that comes down from the rational principle and shapes the indeterminate motion. This is not affected or altered, but either causes an affection, or supervenes and exists together with an affection, but in a prior way. Perhaps it would be truer to say that the affection takes place in the substrate because of it. So in the case of colours, too, changes happen in the composite body, but the *logoi* of the each of the colours are in nature; the giving and receiving of the *logoi* consists in the fact that bodies share in colour.

But it is worth asking just what this affection is. For an affection is said to be either that which is destructive of substance – as decay brings destruction of the body to whatever decays – or the opposite of this, that which preserves the substrate throughout a natural change[441] – as our perceptual faculties are preserved as perceptual by the affections they undergo. Alternatively the change from potential to actual is said to be an affection, as when wax which is moulded to a variety of shapes is said to be affected. It is also possible to distinguish affections according to the types of change; for the affec-

tions occur neither in terms of substance or of quantity – although neither substantial nor quantitative affection is akin to the affection under discussion – nor does qualitative affection comprise the whole range, since this has been defined as one type of quality. But, if anything, such affections occur in coming-to-be and in change to actualised affective qualities. For they are starting points (*aphormai*) and, as it were, gradual preparations (*hupokataskeuai*) for affective qualities. That is why in the *Metaphysics* Aristotle, when dividing affections, says:[442] 'An affection is said in one way to be a quality because of which alteration is possible, for example white and black, sweet and bitter, heaviness and lightness etc.; in another way they are the actualisations and alterations of these; even more than these there are harmful alterations and motions, especially destructive damage; furthermore, extreme disasters and damage are called affections.' In that passage he rightly added under 'affection' alteration, alteration in actuality, harm and motion and the like as motions. This shows that he was right not to distinguish affections from qualities; for affective qualities subsist around alteration and motion in affections; they are completed and given their form by them, whereas an affection is considered as being incomplete, rooted in the material order and akin to qualities that result from affections.

Since being enduring and hard to change seems to be what is characteristic of affective quality, and what distinguishes it from affection, one should not understand the term 'enduring' as one would in the case of state, but one should envisage endurance in relation to the affection. For that which is thought of as being qualified must remain just that in some way or other, so that it may be and be said to be qualified in some way, not being given its form by what is enduring, as state is, but by the quality persisting in the affection.

Since he distinguished between psychic and bodily affective qualities,[443] we must ask whether ecstasies, strong passions and such-like things are particular to the soul or common and belong to whatever has them.[444] So if he was content in the first book of *On the Soul*[445] that such feelings should originate in the body so that we are often easily moved to anger although there is little incentive, and often not so moved even when the incentive is great, when the body feels no passion and is not in itself aroused to the affection – if that is the case, he meant that the affections of the soul occur because of the dominant factor in it which is prevalent in the composite living creature. For these conditions in the soul which are akin to the body, tend towards coming-to-be, not in control of themselves, drawn on by the body and more material are the causes of those psychic affections. So much for that. It is now time to follow Aristotle and turn to the fourth type of Quality.

10a11-b11 The fourth type of Quality [is the figure and shape that belongs to each thing, as well as straightness, crookedness and anything like these; for a thing is said to be qualified in a way in virtue of each of these; for something is said to be qualified in a way by being triangular or square; and each thing is said to be qualified in a way by being straight or crooked, i.e. in virtue of its shape.

Rare and dense, and rough and smooth, might seem to signify quality, but such items would appear to be alien to qualitative distinction, since each apparently reveals some kind of position of parts – something is dense because its parts are close to each other, rare because they are spaced out; smooth because they lie more or less evenly, rough because some protrude more, others less. Perhaps some other mode of Quality may come to light, but those that are generally mentioned are more or less these.

Qualities are what we have listed; qualified things are what are called paronymously after them or which are in some way derived from them. In most, if not all, cases they are paronymously named; for example, a man is called pale because of his paleness, literate because of his literacy, just because of justice, etc. But in some cases, where the quality does not have a name, it is not possible to make a paronymous derivation; for example, the man who is said to have the makings of a boxer or runner because of a natural capacity is not paronymously named after a quality, since the capacities in virtue of which they are said to be qualified do not have names in the way that the expertise in virtue of which those who are trained are called boxers or runners have names – for expertise in boxing or wrestling is spoken about, and it is after this that the trained man is paronymously said to be qualified. But sometimes, even where there is a name, something said to be qualified in virtue of it is not called paronymously after it; for example, the good man is called good as a result of virtue, since he is called good because he possesses virtue, but not paronymously. But this is not often the case.] So things that are paronymously named from what we have listed, or which are in some other way derived from them, are said to be qualified.

He quite reasonably gives the fourth and last place to this *genus* or species of Quality, because it is superficial and as it was externally imposed on the surface of body. This type is multifaceted and multiform. In it is figure (*skhêma*) which is encompassed by some boundary or boundaries, and which is the limit of a plane or a solid. It must not be understood as meaning the extent of the lines or planes (for in this sense it would be a quantity), and not as meaning colour, but as

meaning how the surface is configured, whether it is with or without angles. Shape (*morphê*) in the case of each thing is spoken of in two senses by Aristotle, as the substantial form and as the qualified outline (*tupôma*) that the surface has. Now, therefore, it is not being considered as the substantial form (for such a thing is not quality) but as what is seen of the substantial forms on the surface, because of which we say that things are beautiful and well-formed, or ugly and malformed. For such forms are qualities, but different from colour and figure. But it is worth noting that perhaps they are inclusive of them, even if Iamblichus does not allow it.

Some people think that shape is only to be spoken of in the case of living creatures, and figure in the case of the lifeless form; but this does not accord with scientific practice or general usage, which applies these terms conversely, speaking of figure in the case of living creatures and of shape in the case of lifeless things. The description (*logos*) of each confirms such usage; for if shape is spoken of as the limit and outline of a surface, it does not manifest any hold on life; for the term suits lifeless things too. The definition of figure is in no way precluded from being applied to natural things and the bodies of living creatures. If anything, it must be said that figure is nothing more than that which is contained within an external outline, and that shape is that which is contained within the terminations (*apoperatôseis*) of proportion or disproportion; for the shape copies the completion of the form on the surface.[446] Some people understand that shape is to be used only in the case of natural things, and Iamblichus seems to allow this opinion in what he goes on to say, since shape is not spoken of in the case of mathematicals and figures in general. He says we speak of the shape of each thing because the shape, being enmattered, is subordinated to the individual. Iamblichus says that straightness and crookedness are spoken of as the quality common to geometric figures and shape, and that because of this common feature which applies to both, which is seen commonly in the case of both shapes and figures, and which exceeds either, it is spoken of in its own right.[447] He says: 'Line itself, *qua* line, is a quantity, while straight [and crooked] line, *qua* straight and crooked, would be thought of as qualified. The surface, *qua* surface, is a quantity, but *qua* plane surface, it is qualified. These considerations hold good in the case of shape too.' So perhaps straightness and crookedness would be of lines and surfaces *per se*, but not of shape *per se*; if anything it would be *per accidens*, in that, in my opinion, shape includes figure.[448] He added 'and anything like these' to straight and crooked meaning spiral, conical, lens-shaped figures etc., which have a nature which is a combination of straight and curved, as the geometricians say. He establishes that they are qualities from the account of Quality; for if anything is said to be qualified because of each of these, and if that

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because of which a thing is said to be qualified is a quality, then each of these would be a quality.[449]

[Aristotle] says[450] that rare and dense are not paronymously named after rareness and density, nor do rare and dense denote things in a certain state, but (meaning the rare) because its parts are far apart from each other so that a foreign body can be inserted into it, as in the case of sponge and pumice, while dense has its parts close together so that no foreign body can be introduced, as is the case with gold and iron. So if he shows that these are rather the position of the parts and not a special character, they would not be qualified. This is true also of smooth, whose parts lie straight and even, as in the case of dressed marble, and true too of rough, whose parts do not lie evenly, with some projecting and others being indented, as is the case with a saw. Such features, then, indicate position. Position is either in the category of the Relative, as was said *ad locum*,[451] or else is put under Position; for things in position display some position.

In my opinion it is worth noting that perhaps rarity and density, and smoothness and roughness are qualities according to their character, as warmth and coolness are, and also display some position according to the arrangement of their parts. There is nothing surprising about putting the same thing in different categories in different respects, as is the opinion of Aristotle and his commentators.

Having completed his enumeration of the species of Quality he adds: 'Perhaps some other mode of Quality may come to light.' He is not, as some think, displaying philosophical caution; nor is it, as others imagine, because of difficulties in his account of the division of the original four types; nor is it because he is pointing out the differences by which rational, irrational and the rest are seen as qualified (the substantial properties which distinguish kinds),[452] for these are substances, not qualities; if they were qualities they would not in this way have been relegated to the lowest rank. Andronicus adds a fifth type in which he puts rareness, density, lightness, heaviness, thinness, thickness – but not according to bulk but in the way that we say that air is thin, i.e. thinner than water. He says: 'We say that all such things are qualified because they result from a quality; similarly the bright and the obscure. Consequently we must either posit this as another type of Quality or link these in with affective qualities. For each of these becomes such as it is because body is affected in some way; but they differ from the others in that they do not cause an affection.'

Eudorus posits thickness and thinness as another type, but not the others. Achaicus and his followers range these under the fourth type after rare and dense, but say that Aristotle is hinting at the rest by saying 'perhaps some other type …'; in his work *On Coming-to-be and Passing Away*[453] he put these (viz. heavy, light, hard, soft, rough,

smooth, thick and thin) together with warm, damp, cold and dry. But why should anyone allow these since no one type is mentioned by him under which they are to be ranged, as he did when discussing the first type (state and condition), and when discussing the second type (natural capacity), as well as some single thing in the case of the 264,1
others? It would be better to say that in truth there are some other modes, which he presents in his more mature work the *Metaphysics*.[454] But here he sets out the ones most commonly spoken of by way of introduction.

He adds a common point about all the species, saying[455] that 5
'qualities are what we have listed; qualified things are what are called paronymously after them or which in some way are derived from them.' He said this because some things are paronymously named, as the white is named after whiteness, while others are homonymously named, as the triangle, rectangle and each of the other figures. For in this case 'triangle' denotes both the quality and what participates in it. Furthermore in some cases both have names, as 10
'writing' and 'the writer'; in some cases neither, as 'aptitude (*epitêdeiotês*) for writing' and 'the person with the makings of a writer'; and some cases just the one has a name, viz. the one qualified, as in the case of the person with the makings of a runner[456] or a boxer[457] since the aptitudes have no name since boxing and running are actualised expertises as a result of which boxers and runners are 15
said to be qualified; for would-be boxers and would-be runners signify those who are qualified by a capacity, who are paronymously named from the expectation of the state that they will possess. There are occasions on which a name is established for the state, for example 'virtue', but not for the person qualified by it; for he is not called 'envirtued',[458] and the good person is not so-called after virtue, nor is [he called] 'the envirtued man', just as a man is not called 'written' 20
because of his writing. In some cases the significations of the names vary from the manifestation of the activities on account of inconsistency of usage; for the just man (*ho dikaios*), as far as the name is concerned, is so called after justness (*hê dikê*), but as far as the activity is concerned after justice (*hê dikaiosunê*); the 'Guardian of justice' (*ho dikaiosunos*) is named after justice in the way we speak, as the joyful man is named after his joyfulness, but according to his 25
activities he has nothing comparable. So because of all this he added 'in some way are derived from them'. He referred them either to the fact that 'some qualities do not have names', as is the case with natural capacities, or else to everyday speech which does not have one of the pair in common currency, as in the case of 'virtue' and 'envirtued'. It is clear that this happens in a few cases, whereas mostly 30
the name derives from the quality, as a result of which the things are qualified. This much by way of clarification of the text. We should

now turn to the individual questions and their resolutions; but before doing so we should make a still more rigorous examination of what has been said.

The Stoics say that figure provides tension (*tasis*),[459] for example the interval between points; so they define as straight the line which is stretched to maximum tautness. But in this way mathematical substance will be done away with, for it is unchanging and free of all alteration, and thereby of tension too. If anyone were to think that the incorporeal substance of figures was also questionable, whether it exists or whether it is nothing more than hypothetical, and now imagines that the argument is about figures in bodies, we will reply that according to Aristotle the cause of figure is not tension. For if it were, change and alteration would be the causes of quality, which goes against Aristotle[460] and is illogical. For quality is viewed as part of definition, and change is something indefinite; it is rather the case that it needs definition. If anyone were to posit two types of figure, one type being incorporeal (as Plato[461] says the Forms of circle and other figures are), the other being divided amongst bodies, (and even a third type with some nature between Forms and particulars),[462] then it follows that we must ask the question whether incorporeal figures have one mode of being and corporeal ones another, and whether figures are now being spoken of in terms of some single account of both, or only the one under consideration in the case of bodies, and whether the controlling factor in qualified figure derives from a quality in the figure which is different from what is controlled, or whether there is no controlling factor at all, and figure is to be considered on the level of a completion which in any case supervenes on, and exists together with, the nature of the bodies merely because of their being limited. But there could be no common prior form of the corporeal and incorporeal which is other than them,[463] unless one were to say that incorporeal figures, in that they provide a cause for figures instantiated in bodies,[464] also provide a common originating power for the figures themselves, which brings under its control visible figures, draws them together and is present to all of them at the same time; in this way there would be something common. But this hardly fits Aristotle's suggestions. So one could not reasonably posit a controlling factor of the quality in figure; for it is not in this way that qualities act according to him; they are merely possessed.

With regard to the suggestion that figure is to be considered on the level of a completion, if anyone were to say that in this way figures were accidental properties because of concurrence or chance, we would reject his argument; for none of the natural particulars has this sort of an existence. But if someone were to say that the figures in natural bodies were engendered by participation in certain natural

forms and proportions (*logoi*), we would accept his argument and agree that figure both exists *per se* and results from such a cause.

But when some people put even figure among Relatives, as they do colour, sweet and hard on the grounds that they are spoken of in relation to our senses, it is clear that they are confusing everything together; for in this way even Substance and the other genera will be relative to something in that they are perceptible. One should distinguish each of these in its own right and put it in the appropriate *genus*, and then speak of them as being amongst Relatives as perceptibles in relation to perception.[465]

Iamblichus writes: 'We must consider whether shape exists because of qualified figure, as some think, and it is for that reason that Aristotle put it alongside figure. For this is not Aristotle's[466] opinion, nor is it true. It is not his opinion, because he spoke of figure pure and simple, and not shape pure and simple, but of "the shape that belongs to each thing".[467] His precision of language at this point clearly distinguishes them apart. He portrays figure as something common and which belongs to a plurality of things that differ in number or species, while he demonstrates that shape goes no further than the individual natural bodies, when the *logoi* which are divided among perceptible particulars leave imprinted in bodies a final trace of themselves which is proper and appropriate to the individual *logos* itself. That is why one would deny that Aristotle would accept the co-substantiality of shape with figure. It is easy to deduce from the passage in question that such an opinion is wrong; for figure is conceived of in terms of the limits of bulk and shape in terms of the completion of the form, the proportion and disproportion of figure is conceived of in terms of length and breadth, that of shape, which is not devoid of reference to the form, in terms of shapeliness or shapelessness. So we should not think that they are the same as each other, or that the one depends on the other. So if we say that their proportion consists of being easily moulded according to the imprints of the form and the images which are apparent from the outside, and of preserving the trace of the form, and of being able to match it to the *logos*, while the opposite of this is disproportion (and shape is to be viewed in terms of such proportion and disproportion), then we would be giving a more appropriate account of it. But this would not mean that we were saying that the shape is filled out by qualified figures, proportions, qualified colour, rareness and density – for such an arrangement brings many things, which Aristotle arranged under different heads, under the same one [e.g. heading] – nor does it allow us to comprehend the particular nature of shape pure and simple.'

All this is what Iamblichus set forth about shape in his commentary on the text, and I think it worthwhile paying close attention to it. Perhaps it follows from what he says that he means that shape is

inclusive of figure and colour. For if it is considered in terms of the completion and manifestation of the form, and the form is inclusive of everything according to a single account, then its limit will include the limits of everything. So even if the shape is said to be filled out by other things like parts or elements, while being other than them, nothing illogical is being said such as that it is a common conjunction of everything. For you can see that he himself said[468] that straightness and crookedness are common to figure and shape, and it seems to be in no way illogical to demonstrate what is common after presenting the particular features. He says that we should not refer snubness and aquilinity of the nose to shape in a primary way, but rather to crookedness – and he was right to add 'principally'. For shape is not simply completed by snubness or aquilinity, just as it is not completed by whiteness or blackness, but by crookedness and figure in general, just as it is by colour [in general]. It is right not to omit this addition, because in all the items listed under the fourth type of quality the extreme outline and the outermost boundary of what comes to a halt in terms of distance or some other feature of capacity is considered to be the common feature. It is reasonable that this is how it appears, since it is bounded at the limit of its nature; that is why this type is widespread and employs many differentiae.[469]

Concerning rare and dense one could argue against Aristotle's explanation of cause. For to define rare and dense by the distance between the parts or their juxtaposition confirms Democritus' teachings. For he says that when the atomic particles come together they produce the dense, and when they spring apart and are separated by much void the rarefied is created. But this is illogical. For if matter is unified and is sympathetic to itself, and if qualified things are qualified throughout, then it is clear that both rarefied and dense things are unified throughout and are uniform with themselves. But in giving the cause as intervals he makes the qualified an offshoot of relational position. Iamblichus says: 'In reply to this we posit two kinds of rare and dense, one in the forms, which is present throughout, and essential, and is to be considered more intimately connected than a state, such as the rarity of air and fire, which belongs essentially to them; the other is acquired and to be considered as coming in from outside to figure, as is apparent in sponge and pumice; it is not some void that is inserted between, but they are solid bodies outlined by shape, and within these outlines they include the finer bodies. Consequently not all rarity and density is excluded from position, since it is the essential rarity and density that are in no way in position; for that which is considered in terms of figure is strictly speaking distinct from qualified shape in terms of position, and so is precluded from being quality; for it is not foreign to position, but is endowed with form by it. This differs from Democritus' view, since

these are not arranged with regard to the rarity and density in the elements, but with regard to the rarity and density which are supervenient on, and exist together with, shapes and figures. But what is in the elements is form, rare and dense throughout, in no way separated by something else, either body or void. But what supervene and co-exist in virtue of shape in a secondary way and are said to be rare and dense by being in a certain position do not have quality as the cause of their rarity and density, but position.' It is possible to find and resolve the same problems with regard to smooth and rough.

Eudorus wonders how on earth rare, dense, smooth and rough signify position, while crookedness and straightness do not. In reply it must be said that position is concerned with other bodies that are in place or with lines on a surface, while straightness and crookedness give the quality of things that have position, though it is not in position nor receives its form because of it.

Nicostratus and his followers are keen to show that rarity and density are qualities, offering as proof the fact that fire and air are rare, and earth dense, not because of position but quality. It must be said in reply that even in the case of those entities the divine Iamblichus says 'Each of these terms has a double signification – position of parts and quality: position as in the case of things woven together, quality as in the case of air. But it was not necessary to make a distinction between them in an introductory philosophical work. For rarity is one thing where the parts are separated from each other because there is some foreign lighter body inserted, and not void. But air is rare not because its parts are separated from each other, but because it is light and easily divided, which is why it would belong among things that are what they are because of quality, not those that are what they are because of position. Against something which is rare in this way we would set not something dense, but something solid, which is heavy and difficult to divide; such a thing will be what it is because of quality, while what is [rare or dense] by position will be ranged among relatives.'

It is worth observing what sort of signification of solid is set against rare. For if it is the three-dimensional, then surface and line will be set against it; if it is what is strong, then the weak will be set against it; if it is what is difficult to divide in that it is hard, then the soft will be set against it, but if it is hard in that it is dense, then the rarefied will be set against it; and strictly speaking it would not be the solid which is set against the rare, but the dense.

Plotinus,[470] however, does not think we ought to understand two significations of rarity, the one referred to quality and the other to relation. He sees it only as quality; for rare and dense are not determined by separation of parts; anyone, he says, would agree even on this point, that separation of parts too is a quality. In reply to this

it must be said that he should not have confused this double signification of the nature [of rare and dense]; for it is the duty of a philosopher to account for the differences within things that share common features. But, they claim, we should not find fault with separation of parts and refer it to another category; for Being is unified and something single. But it has already been stated[471] that Aristotle did not find fault with the primary and elemental positions of parts, but those already within the outlines of composite entities, which being confined to finer bodies escape our senses [so that we fail to see] how they possess unification in separation.

The Stoics posit a rarefying and thickening power, or rather movement, the one inwards, the other outwards, and they think that the one is the cause of existence, the other of being qualified.[472] This in no way conflicts with the present argument except for what is said about the natural forms; but the discussion is currently about restored rarity produced by separation of parts. Achaicus' followers refuse to refer rarity <and density>[473] both to Relation and to some fifth type of quality; but they do not put them under affective qualities, as Andronicus does, but under qualities of the fourth type, saying that fineness and lightness are consequent upon rarity, and thickness and heaviness upon density. But it is not clear why they refer rarity and density to the fourth type according to Aristotle's views, when Aristotle clearly rules them out as qualities.[474] Even if they are qualities, why will they be referred to the fourth type, when they themselves permeate the substrate, whereas the fourth type is viewed as something superficial?

Since some people at this point introduce a further discussion of heaviness and lightness, we must explain a few points on the subject, and say that what is heavy or light in terms of weight, causing the scales to tip with a greater or lesser downward inclination (*rhopê*), would be a quantity, since even Archytas defined one species of quantity according to the downward inclination of the scales and weight. But the particular corporeal features because of which air is said to be light, but fire lighter than air and earth heavy and heavier than water – these manifest quality. The lean and thick, similarly, [manifest quality]: on the one hand, when they are in a mass and are measured according to it, they are seen as quantities; but on the other hand, when they are considered in the particular feature of the character, they are qualities. So as regards those things that are not ranged alongside quantity, but alongside the character and the quality – are these to be put in some other species of quality besides the four listed (as Andronicus and Plotinus assume) or is it possible to add them to one of the four? The answer will become clear if it is appreciated just what heaviness and lightness themselves are. For if warmth which causes bodies to expand makes what is light like itself,

and if cold which causes bodies to contract makes what is heavy like itself, these too will be put under affective qualities. But if lightness is a concomitant of warmth, and heaviness of cold, and if warming and chilling are active while heavy and light can neither act or be acted on, then the one will seem to be referred to affective qualities, and the other to some other class of their own. If they belong essentially to the elements, they will seem not to be qualities; but if what has received them is qualified and is said to be qualified and some formative character is produced as a result of the essential difference in things that partake in it, then these too would be qualified.

It seems to some that the *genus* of Quality is so widespread as to be inherent in all the categories; for some qualities are substantial, as manhood and Socrates-hood, others quantitative, as the straightness or crookedness in the case of a line, and triangular or rectangular number[475] in the case of numbers; quality is also seen in Quality, as the piercing and compression in colour; the relationship of double and half belongs among relatives; also in Where, when we say a place is fresh or muggy; and occasion and opportunity are in When; active and affective qualities are in Action; well and badly placed are in Position; well and badly dressed are in Possession.[476] They say that even things like the Hippocentaur have got into the non-existents, and things like cicada-hood in winter into the impossibles (by impossibles they mean things that do occur in nature, but not at some particular time or in some particular place). Of these some manifest the quality only by the form of the word, for example manhood and Socrates-hood, not themselves being qualified, while others simply do not exist and do not have any sense, like Hippocentaur-hood or cicada-hood in winter; for what quality could there be of things that do not exist to produce such entities? Concerning the rest it must be said that the differentiae of quality belong only to the appropriate quality, while those that are seen in the other categories, in whatever individual category they complete the proper account of that category, in no way depart from the particular feature in each to join the *genus* of quality. But when they occur otherwise, defining the character from outside, we should consider these to be qualities, for even in this case they delimit the particular kind of being from surrounding kinds. Perhaps we should explain that more clearly; Quality is seen in substances according to substantial differentiae, but in other genera it defines the particular nature of the *genus* as appropriate in each case. For that is the particular feature of Quality.

Since we have dealt with the problems and their solutions, it would be sensible to record more clearly Iamblichus' more intellective observations on the fourth type. For he observes that Plato explains[477] that the figures prior to the creation of bodies are the causes of being

in bodies, and that the differences of qualities result from the differences in the figures; he says that the warm is what is composed of acute-angled figures such as pyramids, and the cold is composed of what has less acute angles such as eikosahedrons, and so on; he is not talking about mathematical figures, since these are not enmattered, natural or viewed in terms of change, as Plato's planes are: for Plato posits these as enmattered and natural. But Aristotle does not posit figures (as Plato does) as the principles of the elements[478] nor does he say they are unchanging, incorporeal and immaterial as mathematicians do, but he posits them as enmattered, supervenient on and co-existent with bodies, and defining and forming their surfaces. The Stoic view,[479] by which they declare that even figures – like other qualified things – are bodily, does not agree with Aristotle's opinion about figures because body is viewed as quantity, while quality is something other than quantity. So Aristotle's position is somewhere between those who say that figures are entirely bodiless and those who say that they are bodily.

Archytas clarified such a position well, saying that such quality does not reside in figure but in configuration (*skhêmatisma*),[480] demonstrating that what has its being in covering bodies belongs to the *genus* of Quality of this type, and that only when the bodies have received their new figure do such qualities supervene and co-exist; what receives figure is one thing, and the qualities occur because of something else, defining their limits by figure and shape after the moulding or during the actual change. He further shows that figures do not permeate but are only superficial; for what receives figure and is not itself figure has figure embracing it from outside. So the fact that such qualities do not exist in actuality from within themselves, but by reception from something else, gives sufficient proof that they are called figured, not figuring. In the same way it is manifested that such qualities exist not because of a primary completeness, but because of a completion which is referred to something else. But Archytas was satisfied with this one configuration in the case of the *genus*, usually making single definitions in the other types of Quality too; but he was not prepared to say that a plurality could reveal a unity, nor to divide a unity into a plurality as Aristotle does; he did not deviate from unity, but saw plurality centred round unity.

But what is this type of Quality, and how does it, being a unity, include many differences in itself? The answer is, as already stated,[481] that the termination of shapes is an outline around bodies connate to bodies, defined according to the essential natural separation of parts, which is conceived of in change and in matter. Just as the figure is the end of the separation, so the completion of the whole form as far as the surface produces the shape which is itself the revealed trace of the form and the final extension of the outward progression of the

logos.[482] Similarly straightness manifests simultaneously the final form of the *logoi* of equality, as crookedness does that of inequality. But if anyone were to assume that the line of the circumference was crookedness, in this way too it manifests the illumination of the turning of the *logos* back to itself.[483] All these things are because of the termination that proceeds outwards. Consider how close to each other these things are – not distant from each other – when viewed in terms of the final image of the surface and the final limit of the outline. This is why they are ranged under the one type. In so far as each one of them is distinctively defined by a difference in the particular feature of the endpoints, a particular species is revealed separately in each case, and more are considered. In this way both differentiation of the many species and the reduction of them to a single type are preserved.

But where does this single type which includes in itself many species come from? The answer is that some limit in bodies analogous to the limit in the form follows from the lodging of the form in something other, and this defines the bodies according to an image of more important and prior limits in the *logoi*; the existence of the fourth type of quality results from this cause in the bodies. At least the nature of what receives the form, being enmattered, in extension, compound and needing an outline that will define it in respect of all the particular features seen in it – this provides a secondary service; but no less than these, so do the progression of the forms towards each thing as far as the images manifested in bodies, and the difference of masses, matter and perceptible extension; for the completion in all these, defining the limit of all such things, gives existence to the type of Quality now under consideration. Service is done by this type which defines the particular nature of each thing and in a way endows them with form and allows bodies to be revealed as bodies; it produces mass as measured mass, and distinguishes the indeterminate in bodies by means of limits.

Since this has been stated about the fourth and final type of Quality, it would be sensible to question those who attempt to divide the types of Quality differently and to note in what respect they deviate from what is strictly accurate.

Plotinus makes his division,[484] saying some qualities belong to body and some to soul; but he is not really making a division of Quality in this way, but merely exemplifying a difference in the things that qualities reside in, which does not make a distinction within Quality. So Aristotle, when he said that some affective qualities are of the body and others of the soul, did not proceed to another type of Quality, but remained in the same one, knowing perfectly well that the receptacle, as it exchanges forms, causes difference in the underlying place, but makes no difference in the inherent form or character. But again he

divides the bodily qualities according to perceptions, falling into the same illogicality and chopping up the unity, according to Iamblichus, into numerical but not specific differences. For the perceptible *qua* perceptible is one species, and even if you understand what is linked to each of the senses as a particular perceptible, he divides them numerically. Aristotle demonstrates this; for ranking the affective qualities as perceptible in relation to perception, he referred them in common to all the senses, but did not add those that are coupled to each sense on the grounds that they cause specific difference, but are only numerically distinct. It is worth asking whether the senses differ from each other in species as well as the particular objects of the senses; Plotinus attempted to show the specific difference from the senses; for such a difference is not numerical, since it too divides particular objects of sight into individuals. But if Aristotle did not make the division so far, it is nothing surprising, since he moves the argument forward as far as the first division of the highest genera into species, which is what Plotinus should have preserved when making his division of highest genera. But Plotinus divides the qualities of the soul according to the parts of the soul, although it is possible to have the same quality in several parts, like obedience and disobedience, and many qualities in one part, when it has a plurality of faculties, just as it has many skills which are different in species in the rational part.

He next divides the qualities of the rational part, which are many, according to skills and arts, descending to the very lowest and not abiding by Aristotle's inclusion of them within a single *genus* of state, and not realising that it is not the intention to extend the division into types indefinitely, but to present only the most generic and the next after these, of which they are predicated. Consequently, when he adds the powers in the appetitive part of the soul, we should not accept the procession of the division this far. For this is an enumeration of the lowest species, not a division of the highest genera. In general all divisions ought to be made in terms of the proper nature of each [*genus*]. Division into parts is appropriate for Quantity, for Quantity is divisible into parts. In the case of compounds, whether they are corporeal or incorporeal substances,[485] provided they have some lessening of being within themselves, this is not inappropriate. But when someone divides Quality not *qua* Quality, i.e. when it is present in its entirety throughout in so far as it is qualitative, and when it is the same in each and every one of the parts, large or small, as the sweetness of honey is present in each and every bit of the honey, then he is not conducting the division correctly; for he is attempting to make the division of the Quality not as it is naturally constituted. Perhaps it is not even correct to say that all quality pervades what is qualified, since the fourth type of Quality is viewed in terms of what

is superficial, and since the triangle and each of the other figures, having lines and angles, is not present in its entirety throughout; for not all the lines and not all the angles contained by the lines are at the same spot; then the same quality, like wisdom or blackness, is not present to soul and body. So in this respect it is not absurd to distinguish psychic and bodily qualities.

But qualities and actualities are different, and to judge qualities, when they occur because of actualities, from the actualities is to transfer what is to do with potentiality to Quality. For the potentialities, which are indiscernible, are recognised from the activities which they occasion, but the qualities, which make the qualified things manifest by means of the discernible qualified things, which are something other, will themselves be distinguished in terms of the most important genera. But even in this case it must be observed that qualities have powers, and it is not absurd that potentialities are recognised from actualities, and existence from potentialities.

But when Plotinus distinguishes[486] psychic and bodily qualities by benefit and harm, and again divides benefits and harms, thinking of these as the proper differentiae of quality, because all benefit and harm derives from quality, he is not making a correct division here either, because he is moving from Quality to Relatives; for honey, which remains the same in quality, can be beneficial to one man and harmful to another; myrrh is pleasant and beneficial to some, but harmful and fatal to beetles; consequently beneficial and harmful are not qualitative, but relative. Then why do benefit and harm present more differences in Quality than in Substance or Action? For benefit and harm are to be considered there too. The skill of doctors and what they say about the balance of quantity shows that quantity too, when well matched to potential, is the cause of much benefit, and when not so matched is the cause of much harm. In addition if qualities were active and produced qualified things by their activity, it would be possible to say that they do benefit or harm. But if they act by being possessed, they cause no harm or benefit of themselves, in so far as they are qualities. In general all such divisions are inappropriate in that they make divisions according to the Relatives rather than being qualities.

After [our consideration of] the great Plotinus we should consider also what division Aristotle proposes elsewhere.[487] He posits two powers and, so to speak, principles, the active and the passive. And of these, he classifies those powers that reside in irrational beings as irrational, and those that reside in rational beings as rational: for example, the power of warming in what is warm is irrational, while the power [of healing] in the doctor is rational. So the one, the irrational, is productive of just one thing – for warmth does not have the power of chilling; but the rational powers are both productive and

cognitive of contraries. The reason is that all reasoning demonstrates the object and its privation – except that it does not concern itself with each equally, but [it concerns itself] with the one *per se* (the better), and with the other *per accidens* (the worse): the doctor *vis-à-vis* health and disease, for example. This division is agreed to be Aristotle's, but is not accepted in the case of the primary types of Quality – perhaps not in the case of quality at all; we must not transfer the divisions agreed by the ancients from one *genus* to another, but preserve them in cases where they are offered. Some such observations are made about all the species of Quality and generally about the discussion of it.

Since we divide even Substance according to qualitative differentiae, talking for example about the rational and the irrational in a living creature, and positing some [of a man's] actions as good, others as evil, we ought to ask how one should divide the qualitative into species, what differentiae we should employ, and from which *genus*. If we were to say 'by quality' we would be saying 'by itself', and it would be as if we were making substances the differentiae of Substance and claiming that a differentia differed by a differentia, since anything that differs does differ by a differentia; in this way we would be forced into an infinite regress. By what, then, shall we differentiate flavours from colours? For if it is by the different sense organs, then the differentia will not reside in the subject but in ourselves. And if we agree to this sort of differentia, how will objects of the same sense differ, for example white and black, sweet and sour? If it is because white pierces and black compresses the eyes,[488] and sweet and sour do the same with the tongue, then firstly there will be a disagreement about the affections, whether they are piercings or compressions. Secondly, the person making this claim has not stated the differentiae but the resulting affections. In reply it must be said that just as there is much sameness particular to each of the genera in the categories and their accounts, because of which the same account can be taken into consideration in several instances, there is also much connate difference by which the species are differentiated from the *genus*; this differentiation does not come in from outside, but is connate in each of the genera. So we should not ask whether in the case of Substance it is a substance, and in the case of Quality a quality, by which the species in each of these genera differ from each other. For the differentiae which produce the species do not come in from outside each *genus*, but are co-inherent in each *genus*. For there will not be species of the genera in each case unless the genera have their particular differentiae innate within themselves as something included in the *genus*. If we impose them from outside, for example from another *genus*, the species within each *genus* will produce a mixture of several categories, and the highest *genus* in each category and the

species included in the genera will no longer be ranged under the same category.

So let this be one solution to the problems. But there is another, that while we must seek differentiae of some things, by which we will separate them from each other, there can rationally be no differentiae of differentiae. For they themselves differentiate themselves from each other, starting with their particular capacity; rather they will not need to be differentiated since they are self-differentiating, just as distinction does not need to be distinguished; for in the case of other particular features we would not say that each participates in itself; for example we would not say that the equal is equalised, or that beauty is beautified. Consequently, that which is different of course differs by a differentia; but all other things differ by a differentia which is other than themselves, whereas the differentia differs by itself – or rather is self-differentiating. The Stoics postulate qualities of qualities,[489] making them havable states of themselves; for they no longer need qualities which provide differentiae, since the qualities themselves differ from each other by themselves. Members of the Academy, seeking differentiae of differentiae, have fallen into a regress.

It is also worth asking whether every quality can be an essential differentia. The answer is that we must agree to this in the case of bodies; for whiteness, which is [often] accidental, is an essential differentia in the case of white lead. What about the sciences? The answer is that writing, which would belong to the soul which is by nature [literate], would be a specific differentia.[490] It must be added that things qualified must be ranked with the qualities by which they are qualified in so far as the qualities are in them; we should not bring in the subject, nor make the qualified thing the result of conjunction with the subject, to avoid conceiving of two categories; we should rather retreat from them to what they are called after. It would do no harm to remind ourselves that intelligible and perceptible qualities will in no way be ranked under the same *genus*; for the predications are not about what is conceived but about what is said, nor is it possible for there to be a single *genus* of Quality that embraces true beings and what is borne along in the tide of coming-to-be and destruction, as if they were equals. But since enough has been said about all the species of Quality, it would now be the right moment to consider the particular features of Quality, viz. what is proper to it.

10b12-25 Contrariety, too, belongs to what is qualified, [(for example, justice is contrary to injustice, whiteness to blackness etc.), as well as belonging to what is said to be qualified in virtue of these (the unjust is contrary to the just, and the white to the

black, for example). But this is not always so, since there is no contrary to what is orange or to what is yellow ochre (or to things of other such colours), although these are qualified things.

Further, if one of a pair of contraries is qualified, then its contrary will be qualified too. This would become clear if we were to examine the other categories. For example, if justice is the contrary of injustice, and if justice is qualitative, then injustice is [qualitative] too. For none of the other categories (Quantity, Relation, Where) fits injustice; in short, nothing other than Quality [fits injustice].] This is true, too, of the other contraries that belong to what is qualitative.

In the case of the other categories, he first made the division and then added the features that belong to each: both those that are in common with other categories and those which are particular to the one in question. This is just what he does now. First of all he deals with contrariety as belonging to what is qualified, with the words 'Contrariety too belongs', adding the word 'too' because he will proceed to list other features that belong such as more and less, and like [and unlike]. He said 'what is qualified' when he should have said 'Quality'; this is shown by the examples he adduces – 'justice is the contrary of injustice', for instance; for these are qualities not things qualified. Perhaps he used 'what is qualified' instead of 'Quality' because the quality is included in what is qualified; when what is qualified receives, the quality too necessarily receives, because what is qualified is receptive of it in virtue of the quality. He establishes this by induction, adding examples of psychic and bodily qualities. He says that contrariety belongs not only to qualities, but also to what is spoken of as qualified in virtue of these qualities.

But contrariety does not belong to all Quality, since it does not belong to what is qualified by figure, such as the triangle and the quadrilateral, nor [does it belong] to intermediate colours such as orange and yellow ochre; it is clear, too, that it does not belong to what is intermediate in the case of the other senses, such as lukewarm and the pitch of the middle string.[491] This is quite reasonable, since contraries are what are furthest apart from each other. In fact, contrariety does not belong only to Quality, since it is present in Relatives, as we have discovered.[492] Consequently, it is not a particular feature of Quality.[493]

278,1 He applies a consideration to this point which is applicable to all the categories in which contrariety is seen as a feature. He says:[494] 'For if one of a pair of contraries is something qualified, then its contrary will be qualified too.' In general if one of a pair of things that are marked off as opposite members of a class as contraries is found in a genus, then what is marked off as its contrary will be found in

the same genus. Aristotle says:[495] 'This would become clear if we were to deal with the other categories', confirming such findings by induction in a way appropriate to an introductory treatise. It would become clear in another way, too, from the definition of contraries. For if contraries are what are furthest apart from each other in the same genus, it is clear that whatever genus the one is referred to, the other will be referred to it too.

But since the definition of contraries has not yet been given Aristotle was right in deciding not to exploit it. So if we ask in which of the categories, in which there is contrariety, anything is to be found,[496] we will discover in the process how we ought to conduct the enquiry. For we shall take the contrary of what we are seeking, if it is the more knowable [of the two]; and if it is known in which category it is to be found, we shall know that that of which it is the contrary should also be put in the same category; for example if we asked in which genus injustice is, we must take justice there too; and justice is a quality, so injustice is also a quality. Similarly, if blindness is the contrary of sight, and if sight is a quality, then blindness too is a quality, since it will fit into none of the other categories.

But why did he say:[497] 'If justice is the contrary of injustice'? Why did he use the conditional conjunction 'if'? The answer is that some people did not agree that injustice was the contrary of justice, but said that the state contrary [to justice] had no name, and that injustice was a privation; but they were wrong when they claimed that states should be spoken of in positive terms, and privations in negative terms, since we do speak of states in negative terms (for example, we say that immoderation is [the state] opposite to moderation) and we do speak of privations in positive terms (for example, blindness and deformity). This cannot be denied; but perhaps Aristotle said 'If justice is the contrary of injustice' because he had not yet told us what contraries are, and because in fact these are opposed to each other not *qua* contraries, but *qua* state and privation. So Archytas was more accurate when he said that not only does contrariety, but also privation, belong to Quality, writing: 'Certain features belong in common to Quality, such as the ability to receive some contrariety and privation.'

Some people find the following difficulty with the argument from contraries: 'If this argument is sound, then the privation which is contrary to the form will be a substance; for form, too, is substance. But if anyone were to say that it is privation that is more commonly spoken of as being contrary to form, he would be wrong; for if form and privation, the principles of natural things, are spoken of as contraries, then coming-to-be will be from contraries; and if these are contraries, there will no longer be two principles, but a single common genus from which the two [principles] derive.' It is easy to resolve this

difficulty; for these are not primary principles, but the principles of natural things; it is nothing remarkable that there should be some common cause of them, whether it be nature or form, since each of these operates by its presence or absence. With regard to the former, one could say that since form and matter are subsumed under Substance (for form is taken along with the matter), for this reason nature, too, will be present in the substance because of the form and the matter. But if anyone were to say that privation is included in the form in virtue of the absence of the form, then it will be included in the substance in this way too. It would be better to say that the rule does not apply to all contraries but only in the case of those where one of them is to be clearly found in a certain genus and the other is of necessity to be found there too. That is why Aristotle did not say that contraries are in the same genus, but that *if* one of the contraries is to be found in a certain genus, *then* the other will be found there too. Yet in what follows, where he distinguishes the types of opposition, he wants what are strictly contraries to be in the same genus; for those things like justice and injustice that seem to belong among contrary genera have some transcendent common genus. That is why Aristotle himself took not the immediate but the more remote genera. For he did not say: 'if one of the contraries is to be ranged under virtue or state', then the other one too will be; but [he said]: 'if one of them is something qualified', then the other is too. What, then, shall we say in reply to those who posit the primary genera as contraries (such as the same and the different)[498] or as the two columns (as the Pythagoreans do)?[499] The answer is that not even these are primary; for it is impossible and even the Pythagoreans find it unacceptable that the primary genera should be many.

But why are the vast majority of contrarieties considered under the heading of Quality? The answer is that there are contraries in colours (such as white and black), flavours (such as sweet and bitter), tangibles (such as hot and cold, and soft and hard), pitches (such as high and low), [matters] to do with the body (such as disease and health, beauty and ugliness), and [matters] to do with the soul (such as virtue and vice, etc.).

But it is worth asking why contraries belong generally to Quality and are not seen to apply to Substance. I imagine we should say that contraries cannot co-inhere with each other; so they are bound to come and go, which is why they are not under consideration in the case of Substance, but are especially in the case of Quality which is extraneous (*epeisodiôdês*); for with Quantity contrariety is sometimes there[500] (as in the case of odd and even) and sometimes not (as in the case of a definite quantity); but it is quite reasonable to say that contrariety occurs in the case of a Quality, since it is one of those things that supervene and co-exist, and supervene now on one thing, now on

another; for contraries have their existence in other things[501] and are to do with other things, so that it is because of the existence of qualified things that contraries by nature subsist with them.[502]

In another way too, since the primary differentia is qualitative, the most significant differentia, viz. contrariety, is qualitative; and since the primary division is qualitative, as it proceeds it produces contraries. Most contrarieties are to be found in what is qualified, since qualities are multiform. But we must track down the contrarieties in a fitting manner, employing the appropriate powers in each case. So because in the case of bodies the contrarieties are perceptible we must hunt them out by perception, while psychic contrarieties must be sought out by reasoning, since that is how they are to be comprehended. So he quite reasonably linked this consideration concerning contraries with the discussion about Quality, because, as has been stated, what is contrary is particularly akin to Quality. For in the other categories contraries seem to occur because of the qualitative in each of them. But we should not take the contraries together with the substrate (for the substrate is common to them, and they will not be taken as wholes opposite to wholes, nor will they truly be contraries) but we should consider them as contraries only in so far as each is qualified; for they are qualified in virtue of possessing a quality, so that contrariety belongs to them in virtue of quality.

But why is it that the intermediates are not contrary to each other or to the extremities? It is because if the intermediates too are contraries, then there will be a plurality of opposites to a single item, and a single item will no longer be the contrary of a single item.[503] Plotinus wonders[504] whether there is perhaps some contrariety in every quality; for the midpoint is contrary to the extremities; for according to Aristotle virtue, being a mean state, is contrary to excess and deficiency, which are vices. In reply it must be said that the quality is viewed as a mean in one sense, and as a virtue in another, and that as a mean it has no contrariety, while as virtue it does. Furthermore we consider the mean as equality, and excess and deficiency as inequality. So when we say that the mean is contrary to excess and deficiency, we are not saying anything other than that equality is the opposite of inequality, and so on – but it is not an opposition to what is the mean.

But someone might object: 'In the case of colours the opposition between the extremities and the intermediate is not like this; for if gray is opposite to white, it is opposite to it either because of the admixture of white that is in it, or because of the admixture of black in it. But if it is because of the admixture of white, then white will be the opposite of white – which is impossible; and if it is because of the [admixture of] black, then black is opposite to white, and the mixture [as a whole] is not a *tertium quid* of a different kind.' The conclusion

is correct that gray is not to be opposed to white or black as a contrary; but the method of reasoning is open to many objections. For it makes the intermediate a compound of the extremities, made up of both, and not something distinct from the extremes; it preserves the uncompounded in actuality in the admixture, but not in potentiality, if this is at all possible. For perhaps the intermediate colours exist not because the extremities are admixed, but because there are some prior *logoi* of them too, just as there are of the extremities which exist not because of some admixture, but are simple, have innate difference and variety which they produce in sensible objects, and are ranged alongside the other *logoi* in parity of status. If anyone says that the intermediate has some sort of existence derived from the extremities, it is certainly not an admixture that produces the intermediate, but the contraries being in juxtaposition, or on top of each other, or at a greater distance from each other. For intermediate colours seem to exist in all these ways according to his treatise *On Sense and Sensible Objects*.[505]

But Plotinus says:[506] 'If the intermediates result from a combination of the extremities, then we ought not make a division by talking about white, black, gray, yellow etc., but should divide only into white and black, and call all other colours combinations of these. As it is, we do make such a division and opposition, because even if there is an admixture of the extremities, it is not a juxtaposition, but a blending which produces another quality from the blend. So we make the opposition because another quality is produced in the case of the intermediates, even if it is viewed as a result of combination.' This is what he says, and his successors agree that the intermediate quality of colour is something different, but they do not agree that it is to be viewed as a result of an admixture or that it is other than a combination; for they say that this is not the mode of being for incorporeal qualities, although bodies can produce different bodies by admixture, blending or combination. For the compound and mixed genus stands differentiated within itself in respect of that in which it has the nature that it has; but that which has its being neither in mixture nor in combination, but has taken on some simple incorporeal essence in respect of a single quality, could not[507] undergo any alteration at all as a result of mixture or combination, just as the undivided cannot be affected by what is divided.

But since Aristotle said that white is contrary to black, and that there is nothing contrary to orange or yellow ochre, it would be worthwhile looking ahead a little[508] and considering the definition of contraries, to determine whether it is correct. For it is from this that we shall discover whether the ideas he has now articulated concerning contraries and colours are right. Contraries are said to be what are furthest apart from each other in the same genus, such as black

and white; for these bear no trace of each other; but gray, yellow ochre, orange etc. are not the greatest distance apart, because they are blended with each other. Plotinus puts the question:[509] 'how did you define contraries in this way? If it was from the intermediates and the distance in relation to them, you are not making the contrariety in terms of the extremities but of the intermediates; so too with the distance apart. And why will you say that the immediates (*amesa*)[510] are contraries, such as health and illness? If you take the distance in terms of the form itself, when they have no specific similarity although they are in a single genus, let us say Quality, why will russet not be the contrary of white, since it has no proximity to white, as gray seems to have?' In reply to this they will say that the extremities do not admit the greatest possible distance from the intermediates; for contraries do not produce their distance from each other by means of some journey, nor is it in this way that they cross the midway point and land in some contrary area; rather the distance is in terms of their *logoi* and forms.[511] So we should pay attention to their particular features, to determine whether some are of such a nature as to cancel each other, while others reveal simultaneously a proximity of nature in relation to one of the contraries, or a manifestation (*emphasis*)[512] of the extremities, or a slackening of the one and a tightening of the other, or some other similar intermediacy. For those that are of this kind are separately distinguished, the extremes in one way, the intermediates in another. The intermediates are not prior in such a way that the extremes can get their distance from them; on the contrary the extremes are prior to the intermediates with regard to existence, and the intermediates get their definition from the extremities, and what is between gets its definition from the contraries either by combination, or manifestation, or similarity, or juxtaposition, or in some other way. If coming-to-be proceeds by change from one contrary to the other through the intermediate, it is possible to say that contraries, proceeding through the intermediate, are distant from each other. But if neither change nor coming-to-be are under consideration, but the extremities are primary *per se* and not brought forward in a process of change through intermediates, they would not get their distance from the intermediates, so that their being cannot derive from them either; it is much more the case that they get their distance because of the very form and its difference, when wholes are clearly different from wholes.

'But russet will be contrary to white according to this distinction.' The answer is that this is not so. For russet has some proximity to white, as Plato agrees in the *Timaeus*[513] and Aristotle in *On Sense and Sensible Objects*.[514] For both represent the existence of russet in 283,1 connection with white as something akin; they use different methods of production, but are in agreement on this point – that russet has

some comparable manifestation with white. Evidence from the senses would easily convince anyone of this; for when we are comparing white things with russet we do not make the same contrast as we do between white and black; for when we are looking at russet things in contrast to white things we do not switch to an entirely contrary perception as we do when we are making a distinction and a comparison as with the two others [black and white]. In this way the immediates too will be contraries if they have no specific similarity, even if there is nothing lying between them that tends to both sides; for their contrariety will result not from the intermediates, but from the particular nature of their *logoi*. But the intermediates will not be contraries, because they have something[515] in common with the extremities both of which they manifest together, having something similar to themselves. It is utterly absurd to claim that if russet is not contrary to both black and white it will be contrary to something else; for how could that which consists in an admixture or manifestation of contraries and is not the greatest possible distance apart from anything be contrary to anything?

But all these points would have been more suitably addressed in what follows, where the explanation of contraries assumes the major role; but even at this point they have something to say by way of reply to those who challenge Aristotle's words. But since some think that Aristotle missed out a contrary to Substance, on the grounds that the four elements (earth, fire, water and air) are substance, we should realise that these, too, possess their contrariety because of qualities present in them, although he says[516] that water is contrary to fire, and earth to air; for water is cold and moist, while fire is hot and dry, and earth is cold and dry, while air is warm and moist – and these are qualities. They do not have contrariety because of their substance (for they are present in the enmattered substance, which is single), but because of the qualities which comprise them.

10b26-11a19 Qualified things accept the 'more and less'; [for one thing is said to be more or less white than another, and one thing to be more [or less] just than another; and a thing can admit degrees in itself – being white it can become still whiter – although this is not so in all cases. One might wonder if one justice is said to be more so than another justice, and similarly in the case of other conditions. For some people argue about such things, claiming that one justice is in no way said to be more or less a justice than another or one health more or less a health than another; but they do admit that one person can have health or justice less than someone else: so too with literacy and other conditions. Whatever the case, things that are spoken of as

qualified in virtue of suchlike indisputably admit 'more and less'; for one man is said to be more literate or more just or more healthy etc. than another. But triangle and square do not appear to admit 'more and less', nor do any of the other figures. For all things that admit the definition of triangle or circle are equally triangles or circles; but if something does not admit [a definition], it cannot be said to be more than something else – a square is not more a circle than an oblong is, since neither admits the definition of circle. In short, one thing will not be said to be more than another if neither admits the definition of what is under discussion. So not all qualified things admit 'more and less'.

So none of the above features is particular to Quality. But things are said to be 'like' or 'unlike' exclusively in terms of qualities, since it is only because of what makes something qualified that it can be said to be like something else.] Consequently, to be said to be 'like' or 'unlike' because of a quality would be a particular feature of Quality.

He has asked this question about more and less in the case of all the categories – does it belong or not? Accordingly, in the case of Quality, too, he now says that qualified things admit more and less, calling 'qualities' 'qualified things', as the examples show; for he cites 'justice' where he had previously said 'just'. He again establishes the proposition by induction, offering white as an example of the corporeal and just as an example of the psychic quality. For each of these, when compared with other things of the same species and with itself, can be said to sustain development (*epidosis*)[517] and remission (*anesis*); for snow could be said to be whiter than milk, and the white in the human body or the just in the soul undergoes intension and remission in comparison with itself as time elapses.[518] But this is not a particular feature of Quality; for Quality is not the only category to admit more and less since it was said to belong to Relatives, nor does all of Quality admit more and less. For the quality of figures (such as triangularity or the circularity) does not admit degree, nor does perfected virtue or perfected art – but many qualities admit degree. 284,1

There are four schools of thought concerning the intension and remission of qualities and qualified things.[519] Some, for example Plotinus[520] and other Platonists, declare that all qualities and qualified things admit more and less, because everything enmattered does – so matter has more and less because of its connate indeterminacy. There is another doctrine over and against this which states that there is no more or less in the qualities themselves (such as justice and whiteness) since each is a whole and stands according to a single definition, and for that reason does not admit more and less; intension

and remission are rather to be found in what participates, since participation involves latitude (*platos*) and some participate more, others less; that is why states themselves are thought to admit more and less, although it is the qualified thing that admits them. Aristotle seems to hint at this doctrine when he says:[521] 'one might wonder if one justice is said to be more so than another justice', and later:[522] 'one justice is in no way said to be more or less a justice than another … but things that are spoken of as qualified by them indisputably admit more [and less]; for one man is said to more literate, or more just, or more healthy, than another.' But when he says 'so too with literacy and the other conditions',[523] he lumped states and conditions together, just as he did a little earlier with qualities and things qualified.

The third school is that of the Stoics, who distinguish the virtues from the intermediate arts,[524] and deny that they can be intensified or remitted, while the intermediate arts do admit intension and remission. So according to them some states and qualified things do not admit intension and remission, while some admit both.[525]

There is a fourth doctrine which says that immaterial and *per se* qualities do not admit more and less, while enmattered qualities and things qualified by them do. This doctrine differs from the former in that the former makes no distinction between immaterial and enmattered qualities. Porphyry[526] objects to this doctrine as wrongly positing immaterial qualities. He says: 'these are substances, and so, like other substances, do not admit intension and remission.'

Having distinguished between these schools let us see how Aristotle establishes that to admit more and less is not a particular feature of Quality. He says:[527] 'Triangle and square do not appear to admit more and less, nor do any of the other figures.' That is why to admit more and less is not a particular feature of all Quality. Having laid down a general consideration concerning what sort of things do and what sort of things do not admit [more and less], he shows that the figures do not [admit more and less]. Whatever admits the definition of what is under discussion (*ton tou prokeimenou logon*),[528] because of which it is said to be more or less, can be said to become more [or less]; 'but if something does not admit it, it cannot be said to be more so than something else'; so the triangular does not admit the description 'circular'; therefore something triangular will be no more round than something square is. But the white cloak, snow and many white things admit the description 'white', and so one white thing can be said to be whiter than another. How is this the case? Surely all things that admit the same description all admit more and less too? The answer is that they do not all do so. For all particular humans admit the description 'human', yet one human is no more a human than another; consequently none of the things that do not admit the

same description admit more and less, while of things that do admit the same description some do admit more and less while others do not. For if the description is of a substance, it does not admit more and less since Substance does not. Similarly, if the description is of definite quantity or of relatives; for four in relation to two, and two in relation to one admit the description of double, and neither is more or less double than the other. But if the description is of a quality, for example whiteness or sweetness, it does admit degree. So it is quite reasonable to say that in the case of things that fall under the same description some admit more and less, because it is in their case, and not in that of things that fall outside the same description, that the comparison occurs. So if no figure has more and less, then this is not 286,1
a particular feature of Quality. But like and unlike are a particular feature; for in fact both like and unlike are predicated of all Quality, and only of Quality. Enough by way of articulation of Aristotle's text.

Iamblichus asks why Aristotle posits more and less as a common feature of several categories. He says that these are considered in terms of participation, that which participates being one thing, that which is participated in another. If he means participation in matter, then Substance, Quantity and the other categories throughout admit more and less; for all have their terminus in matter. But if he means that the supervenient categories, such as Quality and Relation, are participated in, then Quality and Relation must admit more and less throughout. So perhaps it is true that degree in one way belongs to qualities brought in from outside. But in Quality the more substantial forms such as figure and those viewed of most importance like virtue do not admit more and less.

But why, they ask, is there such a difference of doctrine concerning intension and remission in qualities? The answer is that the cause of such a divergence of doctrines is the very account of Quality, what participates in it and what is compounded from it, since these have many differences among themselves and give rise to differing conceptions. For some think that the very account of Quality is fixed according to a single definition, while others think that it is fixed in some cases and not in others, and yet others that it is not fixed at all; for they say that it is enmattered and with matter, and is altered together with matter's indeterminate nature. Others divide it, positing one immaterial account, and another material one. All these are divided over the question of the differentiae of Quality. In another way the difference in doctrine occurs in terms of what participates in and admits the account, when we say 'partakes of' or 'participates in' latitude, and that it participates more and less. A third difference would be the result of a combination of the two. For when two things combine, the predominance of the one over the other causes intension and remission; when the form prevails 'the more' occurs, and when

matter prevails, 'the less' occurs. And when the form is predominant the account, being defined *per se* in a single form, is fixed; but when the recipient matter predominates, then there is alteration and internal change; when they are equally balanced, some of the parts are stable, others less stable – and that is how the divergent doctrines emerge. After this overview of the schools it would be wise to examine each in detail.

In reply to the Stoics who claim that the virtuous type is stable and that the intermediate admits intension and remission, it is worth raising the difficulty whether the man who possesses virtue, but who fails either because of his training or because of his nature, is not less virtuous.[529] They will perhaps say that because virtue is knowledge it has of itself stability; for because it contemplates its own *logoi* and aims at doing everything according to itself, its activity is stable since it abides in the unchanging form of knowledge. But how could this be possible in the case of the essence of Quality, which is liable to change and affection particularly since, according to them, virtue has within itself an infinite capacity for expansion and contraction – for they call even qualities bodies? So perhaps they are transferring what the ancients said about different kinds of principles to other kinds of principles – unless, of course, when they made the virtuous state undiminished and did not consider it to be subject to change, they were correct in thinking that intension and remission were not relevant in its case. If so, then there is something maximal and stable in each of the arts; for there is something entirely and maximally the case in everything that can be greater or less. So perhaps in the light of this consideration, the doctrine which Aristotle alludes to which allows perfect states in the case of health, literacy and other conditions (and not only in that of virtue) says that they themselves are not capable of intension and remission considering that intension and remission are to be found in the things that partake in the states to greater or lesser degree. But this can be seen not only in the arts themselves, but also in the virtues; for some of the virtues are perfect, others imperfect; the latter are those which are produced only by one of nature habit or teaching,[530] while the former are those which have been brought to perfection by these three things – except, of course, that virtue itself is perfect and complete, and is participated in a partial way like literacy and all the other arts; so the imperfect, the greater and the less are to be considered as residing in participation.

But what sort of conditions does Aristotle see as perfect other than those which are had? Does he mean separable forms such as Justice-itself? The answer is that this is not his usual way of thinking, nor is it in keeping with the matters in hand, nor would these be called dispositions. But having considered those that are participated in as

perfect by reference to them, he wants those that are wanting in some way to admit greater and less.[531] The more correct argument is that which in the case of all dispositions views the perfect in terms of the extreme, and the more and less in terms of participation in latitude.

Of other arguments that of the Stoics,[532] which sees neither imperfection in the virtues nor perfection in the other arts,[533] is itself imperfect. For if virtue is considered as consisting only in reason, then the person who possesses reason and knowledge would not be capable of intension; for true reason is unique, and is not more true reason than another. But if the man who possesses knowledge fails because of his training or his nature, he would be less just. Consequently if 288,1
the perfect state depends not only on the objects of contemplation but also on nature and habit, then one man could be more just than another. In the case of literacy the *logos* is one and the same when it is brought to completion by the objects of contemplation,[534] but the training, which relates to the not completely literate person, produces greater and less degrees in the different manner of participation in the same *logos*. Similarly, although the *logos* of whiteness is one, snow can be said to be whiter than milk because of the admixture in milk of what is not white; for where there is an admixture of matter, there is bound to be some participation in some alien [quality] and intension and remission.

But why does he say that something that was not white previously becomes whiter, or someone not yet literate becomes more literate? In fact, the man who is not at all literate is not said to be literate; but when he is making progress and still approaching literacy, he is. It is similar on the case of white. When we say that one thing is bigger than another, neither is simply big. For the simply big or biggest is one thing, as is simple literacy or extreme virtue. But we must resolve the difficulty by speaking of the comparisons by reference to what is perfect; if they are spoken of in this way, it would be surprising if this perfected quality could be enmattered. For what is perfect and stable would similarly be of another nature and not enmattered. Iamblichus says: 'It would be even more absurd if the quality were enmattered but did not undergo the same affections as the enmattered substrate that receives it; for it would scarcely be separable if it had certain particular functions separated from what is common. It would also be absurd if the quality were always yoked to what is qualified, having a nature indistinguishable from it like a twin, while being entirely separable – if the quality is not subject to intension, while qualified things are. So perhaps in all these cases they were being sidetracked towards the immaterial *logoi*. For in the case of the virtues those who allowed progress, but rejected perfection in men, did not realise that they were supposing that those [virtues] that are perfect[535] would be immaterial, and for that reason rejected those that were enmattered.

If this is so, then the doctrine results in something of an entirely different nature; for the realm of Quality[536] does not belong among immaterial things.' These are Iamblichus' actual words. But perhaps by this argument we should posit greater and less in the case of Substance too; for it is enmattered. But the perfect and stable would be of another nature; so too would Quantity, the Determinate and all qualities.

But I do not think that we should take more and less to depend on being enmattered, but on being brought in from outside and less substantial.[537] For Substance, when considered in terms of being just what it is said to be, does not admit more and less, while Quality, which owes its existence to participation in Substance, can quite reasonably be said to admit degree, more so in the case of what is less substantial,[538] less so in the case of what is more substantial – such as figures. Quantity, which is closer to Substance, would not admit more and less. But not even qualities, when viewed in terms of their extreme perfection, like perfect virtue and perfect literacy, admit more and less. For these are considered in terms of what is undiminished. These perfections are not immaterial and separable *logoi*, but enmattered on the one hand, but considered in terms of the form itself on the other, in that when we define each of the enmattered entities we look not to the matter but to the form. And if none of the enmattered entities ever achieves its perfection, it would be right to say that in each case more and less belong. If this is absurd, then there is such a thing as the maximal.

In this way Plotinus' doctrine will be corrected when taken only in terms of the enmattered and created and not in terms of the particular feature of Quality according to which it differs from Substance and Quantity. In reply to Plotinus' doctrine[539] that has qualities and qualified things alike subject to intension and remission, Iamblichus says: 'It is absurd for the *logos* to alter in the same ways as the compound. For in that case in what way will what is participated in differ from what participates? At the same time his axiom which is common to all incorporeals – that they are not subject to affection and change – will be turned on its head.' Having said this in reply to Plotinus he adds the most correct version of the doctrine, saying: 'Being one of the *logoi* as an incorporeal substance, it gives itself to what receives it and produces the qualified thing in that which is corporeal but remains no less incorporeal *per se* in the body, having being *per se*, and giving the body a share of being while not losing its own nature. Consequently, the shape which is imprinted [on matter] by it is such as to receive intension, but the bodiless essence of the quality is such as to abide in the same form; because of this it does not become immaterial, but enmattered – but it does not belong wholly to matter because the forms belong to themselves and are

properly defined in terms of what is one and the same. And for this reason they do not depart from their own nature at all even in coming to be in matter, but abide in themselves, although in a way they are infected by a dislocation and an indeterminacy contrary to them.'

Further Iamblichus corrects the final doctrine[540] which thinks that 290,1
the intelligible qualities are not capable of intension, while enmattered qualities partake of intension and remission. He says that this is Porphyry's view,[541] that all intelligibles and real beings are substances, and for that reason do not admit more and less. He says: 'In
reply to this it can be said that the status of the *logos* of Quality can 5
be preserved even among intelligibles, even if everything in that realm has substantial existence; for according to that argument rest and motion are to be considered as substance; they preserve, as being amongst intelligibles, the *logos* of the activity inherent in something else and to do with something else.' In general the discussion in hand
is not at all about intelligibles; so let that suffice. 10

Archytas demonstrated the cause of great and less admirably and succinctly when he said: 'Certain common features are attached to Quality, for example the capacity to admit contrariety and privation, and more and less, as is the case with affections. For because the
affections share in a certain indeterminacy, they share in a certain 15
indeterminate intension of degree.' In this way, it is according to its own *logos*, that what is a quality will have more and less, and not as a result of what partakes. For the intension and remission which are seen in what partakes, now of what is purely white and now of what becomes, say, less white when burnt by the sun, even if it becomes so
because of a propensity or lack of it in what partakes because of an 20
admixture of what is not white, it still has excess with respect to the *logoi* that are participated in. For they are instantiated differently in keeping with the other affections. In fact, there is some disagreement whether perhaps the difference is in what receives. But in the case of connate colours like the white in milk and snow, the excess in terms
of intensity is clearly according to the natural *logos*. 25

But why does Aristotle say 'like and unlike are a particular feature of Quality'? The answer, as stated on many occasions,[542] is that quality is brought in from outside and for that reason the kind of identity based on it produces some kind of chromatic range (*parakhrôsis*). For each of the genera has its own type of agreement;[543] some that agree in terms of Substance are bound together by identity,
because they become the same thing; others that agree in terms of 30
Quantity become equal, others that agree in terms of Quality become like. Being supervenient a quality is not wholly and completely the essence of what receives it, but a certain characteristic comes-to-be in some part of it with respect to its essence, which produces the similarity; for the supervenient participation in the same form is

291,1 similarity, as is shown in the Parmenides,[544] while unlikeness is participation in another form. For if it is in particular the characteristic that produces the likeness, and if quality has its being in the characteristic, then it is quite reasonable to say that it has its particular feature because of the like and unlike. Archytas shows this 5 when he writes: 'The particular feature of quality is like and unlike; for we say that those who have the same colour are alike in complexion, and that those who have the same appearance are alike in form, and those who have contrary appearances are unlike. The same description applies elsewhere.' In this case in calling things that participate like and unlike it is possible to refer the cause to the *logos*; 10 for when [the *logos*] is participated in a similar way, the things that are endowed with form in accordance with it become like, and [when the *logos* is participated] in different ways the participants become different. What is more we must understand that the *logos* itself of the quality is the origin of likeness and unlikeness; for it has, in co-existence with itself, like and unlike accompanying its own nature 15 and in general conjoint with it. For like and unlike co-exist with the quality because of its characteristic, viz. because of its common *logoi* which belong to all the species of Quality. That is why the same particular feature belongs to all of Quality.

11a20-a38 We must not be alarmed [if anyone suggests that, in making these proposals about Quality, we are including in our list several Relatives, on the grounds that states and conditions are Relatives. For in almost all such cases the genera are said to be relative to something, but the particulars are not. For knowledge, which is a genus, is in itself said to be 'of' something else – it is said to be knowledge 'of' something; but none of the branches of knowledge is in itself said to be 'of' something else (literacy, for example, is not said to be the literacy 'of' something, or musical theory the musical theory 'of' something). If anything, even these are spoken of as relative to something in virtue of the genus – literacy is spoken of as the knowledge of something, not the literacy of something, and musical theory is spoken of as the knowledge of something, not the musical theory of something. Therefore particular [branches of knowledge] are not relative. But we are said to be qualified in virtue of particular branches of knowledge; we possess them and are said to be knowledgeable by possessing one of the particular branches of knowledge. Therefore these particular branches, in virtue of which on any occasion we are said to be qualified, would be qualities. But these are not relatives.

Furthermore, if the same thing happens to be both qualified

and relative,] there is nothing absurd in listing it under both genera.

It is the mark of the humane teacher to resolve problems that have emerged from the discussion. So Aristotle remarks that although he earlier put states and conditions among things that are relative to something, when speaking about Quality he reckoned them as the first species of quality, and that it is likely that as a result his readers will feel some alarm. For if state belongs to two categories, the result will be that, although being something single, it will employ differentiae that are different in species. For he himself said that the differentiae of genera that are different and not subordinate the one to the other are different in species.[545] So he resolves this difficulty in two ways. Firstly he shows that in all such cases the genera are said to be relative to something, e.g. knowledge and its object, while the species and individuals are not. For literacy and Aristarchus' literacy are not said to be relative to each other or to anything else. For if literacy is of Aristarchus as relative to something, then Aristarchus will be of literacy as relative to something. Similarly the theory of music and Aristoxenus' theory of music. For even if these seem to be spoken of in relation to something, they have their relation because of the genus itself. For literacy is said to be knowledge of something, but literacy is not of something; even if the literate man is said to be knowledgeable by reference to the genus, he will be said to be knowledgeable of literacy, not simply knowledgeable.

Furthermore, literacy is spoken of as being of its possessor, but relatives were not like this. So if relation belongs among the genera and the qualified among individuals, state has one mode of being among relatives and another among qualified things seen as individuals. He shows that what participates becomes qualified at the level of individuals from the fact that we possess them individually and not in general, and from the fact that what possesses partially is said to be qualified. For each person is said to be qualified as a result of his own individual quality, not the general; for example the literate person is so-called as a result of literacy, and Aristarchus is said to be literate as a result of Aristarchus' literacy, not Zenodotus'. So since people are said to be qualified as a result of what is individual, individual qualities would not belong among relatives; for Aristarchus' literacy will not be spoken of as relative to something, which is absurd, since in that case they will convert, and we end up saying 'Aristarchus is the Aristarchus of literacy'.

He adds a second solution,[546] that there is nothing to prevent the same thing from being in two categories, when the references are made not in the same but in different significations. So Socrates can be referred to a number of categories; as a man to Substance, as a

six-footer (if that is so) to Quantity, as a father or son to Relative, as a philosopher to Quality; in the same way according to different features belonging to him he will be referred to different categories. So in what way is it absurd if state and condition are referred to different categories according to different aspects of them? For just as place is a quantity because of its extension, but is relative to something because it is the limit of the container, so too condition will be a quality because 'it is disposed in a certain way',[547] but will be spoken of as relative because it is said to be the condition of what is disposed.

But Alexander of Aphrodisias thinks that for some to belong among relatives and to be referred to another category occurs only in the case of things that are relative, because that which is relative does not have its own substrate at all, but has its existence in one or the other category. But, of course, this is wrong, since it is applicable to all the categories; for since each of the items under consideration is not something single and simple, but is part of a compound nature, it is no surprise that it is put under one genus because of one of its features, and under another because of another. Perhaps in the case of compounds (for example Socrates) Alexander would agree; and when the compound is broken down into its simple uncombined constituents each of the constituents will be referred to a single category – the man, the father, the six-footer, the philosopher. Alexander observed that it was a particular feature of relatives always to exist along with another category; for example a father with Substance, the larger with Quantity, the friend with Quality, the striker with Activity, etc.

But I imagine it could be puzzling why Aristotle says that the genera are relative, but that the individuals are qualified. For it is clear that the individual items in a genus, whatever category that genus belongs to, would belong to the same category. If the genus is Substance, then the individual items in the genus are substances; if the genus is Quality, then the individual items would be qualities; for the genus is not only predicated of its species, but also synonymously of the individual items. So why does he say that the genus is relative, and that the individual items are not among relatives, but are qualities?

A further question I think worth raising is this: what sort of states and conditions did Aristotle posit as a species of Quality? For if they are those which are generic, why does he now say that they belong among relatives and are not qualities? But if they are those which are individual, why not also the generic? For an individual state is also a state, an individual condition a condition, an individual man a man. In reply I think we should say that Aristotle did not mean that the genera were not qualities, nor that the generic state or condition is

not a quality; what he did mean was that even if state and condition are said to be relative, this is not true of all state and condition, but only generic. But all state and condition, generic and individual, is quality. It is nothing absurd for generic state to be relative as well, and individual states to be only qualities, because individual states were not presented as belonging to the genus Relation, but as belonging to the genus Quality.[548] For knowledge as being relative is not cut up into species, but as quality it is divided into particular branches of knowledge, which are not relative, as has been shown, but are qualities.

If we need to propound certain common articulations of the problem of how it is possible to refer the same item to different categories, we ought to say that it is necessary to analyse what has been presented as compounds, reducing each to what is uncompounded, and then it will be possible from the non-identity of the things signified or from the difference between the concepts or from the different character in the mode of speech to distinguish such things,[549] 294,1 and in this way refer the individuals to the categories. We should take into consideration at the same time the genera and the species and the differentiae of each, sameness and difference. For how can the boxer be referred to both Quality and Relation? To Quality in that he is disposed in a certain way; to Relation in that he is said to act in a certain way relative to something. Again, in the case of an affection there is the aspect of completion – the result of the affection – and the aspect of cause – that which produces the affection; so how can the affective quality be viewed as something common? It is because the manner of reference to the same affection and the mode of the common character produces the common feature of formation. We must seek what is found in several genera in the enumeration of the categories; for the division of what is simple is in them. Similarly, even if there are some intermediate or common or interwoven genera, this is not possible for categories. But this was added, since even Aristotle demonstrated it, how it is possible to refer the same thing to different categories. So much for our discussion of Quality.

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Notes

1. Simplicius often fails to name the source of a particular difficulty or objection discussed in his commentary; here he may be alluding to Lucius and his follower Nicostratus, Platonists of the second century AD, fierce critics of Aristotle's *Categories*. See further Simplicius *in Cat.* 1,19ff., J. Dillon (1977a) 233-6 and R. Sorabji (1980) 98 and (1990) 71, 76 and 80-1.

2. It is hard to see why a random listing should 'destroy the linking of things together' (*tên tôn ontôn suntaxin pros allêla*); Simplicius argues at 169,6-30 that to do away with the categories altogether would have this effect, but he does not here show how a random order of listing could contribute to it.

3. Possibly a reference to Xenocrates; see Richard Sorabji's Introduction, p. viii. Some ambiguity is caused by the fact that it is not always clear whether Simplicius is using the term *ta pros ti* in the sense of 'Relation' or 'things that are relative'. Similarly, the term *to pros ti* sometimes seems to denote the category, sometimes the relationship. Richard Sorabji notes in the Introduction, p. ix: 'For Aristotle a relative is not the relationship but the thing related'.

In the translation I have generally rendered the plural *ta pros ti* as 'relatives', and the singular *to pros ti* as 'the Relative' or 'Relation'. Simplicius discusses the use of the plural as opposed to the singular at 159,23ff.

Concetta Luna (1987) shows that many of the difficulties for Simplicius stem from the fact that for him, as a Platonist, Relationship is a form, and as we shall see later, it is participation in the form that is the sole cause of a relationship. Simplicius prefers 'the order according to nature' which is determined by two citeria: (i) affinity with Substance, and (ii) the affinity of categories with each other. According to the first of these criteria, Quality precedes Relation as existing *per se* and pre-existing 'with the status of a subject'; according to the second, Relation comes after Quantity since the plurality of items implied by Quantity (156,29; 158,2-10) needs explanation (158,10-13). Thus Simplicius' order would be Substance, Quality, Quantity, Relation. Luna suggests that Aristotle's order 'according to teaching' is determined by the fact that the notions necessary for the description of one category can be ranged under the following category. Since Substance for Aristotle is sensible substance, whose most basic component is its extension (see Sorabji (1987)), i.e. its quantitative aspect, Quantity follows Substance; next comes Relation because relative terms have been introduced towards the end of the chapter on Quantity.

4. Either a reference to Aristotle's *Categories*, where Substance is distinguished from all the other categories (2a10-11), or more appropriately to the Neoplatonist doctrine that any of the other categories can serve as the subject (or substrate – *to hupokeimenon*) for Relation.

5. Aristotle at *EN* 1096a21 says that the relative 'appears to be an offshoot of

what exists'. Simplicius' assumption here is that although a quality is an accident of substance, it nevertheless exists *per se* (cf. 174,16).

6. Simplicius apparently believes that he is quoting the fourth-century BC Pythagorean, Archytas of Tarentum; but the work that he is quoting from, entitled variously 'Generic Discourse' (*peri tôn katholou logôn*) or 'Ten Categories' (*peri deka katêgoriôn*) or 'The All' (*peri tou pantos*) is generally regarded as a later fabrication, and together with other such Platonising Pythagorean texts of the second and first centuries BC, of various authorship, forms a portmanteau corpus under the name 'pseudo-Archytas'. The distinctions within *skhesis* outlined here may well be derived, at least in part, from the first-century Boethus (see n. 25). Szlezák (1972) 113 says: [Boethus] arrived at a threefold categorisation of all *skheseis* (where *skhesis* has a broader reference than 'relationship' – perhaps something more like 'connection'): (i) in itself and *per se* (*en heautôi kai kath' hauto*); (ii) towards something else (*pros heteron*); (iii) of something else towards it (*heterou pros heauto*). The second and third kind designate the Aristotelian categories of 'Relation and Having' (translated from the German). (See Simplicius *in Cat.* 334,15ff. and 373,7-32.) At *in Cat.* 61,10 Simplicius, paraphrasing pseudo-Archytas 22,19 (Thesleff) says that *pros ti* refers to 'things that are spoken of in relation to each other and cannot by nature be signified without each other', while Having refers to 'things that do not co-exist or share the same nature, but are acquired' (the examples of the latter given by pseudo-Archytas are 'being armed, shod and clothed'). Simplicius' interpretation of pseudo-Archytas is that we need a concept of relationship to distinguish between Substance, Quantity and Quality; every sensible substance must have quality and quantity – hence the term 'connate relationship'; so Relation takes its place with Substance, Quality and Quantity at the head of the categories, and 'in this way the relationship (or perhaps connection) of relatives is simultaneously realised'; thereafter the other categories provide only a sort of relationship, such as that between wearer and garment, which is not connate, but 'acquired and variously composed'. (I am grateful to Professor Holger Thesleff for advice on this point.) Frans de Haas suggests that 'we are probably dealing with a hierarchy of diminishing participation in the form of Relation'.

7. Throughout this chapter Simplicius uses two nouns derived from the same root as the Greek verb *ekhein*: *hexis* and *skhesis*. This verb has two main significations: (a) 'to have, to possess (*ekhein*)', and on occasions the cognate noun *hexis* bears the meaning 'possession' (cf. the discussion at 173,33ff.); (b) 'to be in a certain state'. In this sense the verb *ekhein* is always accompanied by an adverb or adverbial phrase. The noun *hexis* is cognate with *ekhein pôs* ('to be in a certain condition') and is usually translated as 'state' (distinguished from *diathesis*, usually translated as 'condition'; state is continuous, condition more transitory). The noun *skhesis* is cognate with the phrase *pôs ekhein pros ti* ('to be relatively disposed') and is taken by the commentators (it is not a word used by Aristotle himself) in the sense of 'relationship' which is how I have generally translated it. See also Richard Sorabji's Introduction, p. ix.

In his Commentary on Epictetus' *Encheiridion* Simplicius defines *skhesis* as follows (at 346,31 ed. Hadot): '*Skhesis* in general terms is the linking (*suntaxis*) of certain things together; it is either natural (*phusikê*) or intentional (*proairetikê*) of either like or unlike; sometimes it unites (*sunagôgos*), sometimes it separates (*diastatikê*), although the individuality (*perigraphê*) of the items in the relationship endures. Relationship is found between the items that have the relationship; it contains (or rather is contained by) both, by being the relationship so that, even if they are separated and change, they are not completely torn apart, but continue

to belong to each other. So the items that have the relationship are, and are said to be, correlative (*prosallêla*).' (I am grateful to Ineke Sluiter for this reference.)

Similarly, the cognate adjective *hektos* can bear different meanings, such as 'havable' and 'capable of being in a state'. It is not always clear to the translator in just which sense Simplicius is using any one of the above terms on any particular occasion; where there is doubt, I have put the Greek term in brackets.

8. *Cat.* 1b29.

9. i.e. the subsequent order adopted by Aristotle whereby Quality is put after Relation.

10. Especially the affective qualities and affections, as discussed at *Cat.* 9a38ff.

11. Andronicus of Rhodes was a Peripatetic scholar responsible for reawakening interest in the works of Aristotle in the first century BC. He came to Rome where he eventually became head of the School, arranging Aristotle's writings in the order that has come down to us.

12. 121,13ff.

13. Archytas' meaning is that there is a two-level hierarchy within Relation, with the relationships between Substance, Quality and Quantity being prior to all others.

14. See the discussion at 158,12ff. below, and *Cat.* 5b14ff.

15. These are the two species of Quantity.

16. *Cat.* 5b14ff. Simplicius' discussion is at 144,7ff. and 150,29ff.

17. Both Porphyry (111,13ff.) and Ammonius (66,10ff.) agree that Aristotle put Relation immediately after Quantity because of the relative terms introduced at the end of the discussion of Quantity.

18. *Cat.* 6a37.

19. Presumably in his longer lost commentary on the *Categories* entitled 'To Gedalius', since this point is not to be found in his extant commentary (tr. by Steven Strange in this series). See further Appendix: The Commentators.

20. DK96 = KRS 374. Cf. Simplicius *in Phys.* 300,21.

21. *Timaeus* 31C and 35B.

22. Porphyry appears to have claimed that both Empedocles and Plato support Aristotle's order. In the *Timaeus* Plato uses ratios like 3:2 to describe the creation of the forms both of the soul and the body; but ratios presuppose both quantity (since they are both numbers) and relation (since they express the relation of *x* to *y*). Forms by contrast presuppose quality (cf. 121,29ff.); therefore quantity and relation precede quality.

But Simplicius then seems to appeal to an argument more in keeping with Iamblichus' 'more intellective approach', although he does not quote him by name here. Simplicius draws a distinction between the Intelligible and Sensible Worlds. In the latter, where 'the results and compounds' are found, the account holds good; not so in the former, where 'their causal accounts' are found – and so the Archytean order 'according to nature' holds good. He further warns us of taking Plato's mythological account in the *Timaeus* literally.

23. 29,16; cf. Porphyry 111,17.

24. Frans de Haas suggests that this is recollection: the inadequacy of the description merely serves as material for comparison with the innate conception of relatives in our soul.

25. A Peripatetic and pupil of Andronicus of Rhodes, fl. towards the end of the first century BC. See Moraux I (1973) 148-50, and Sorabji (ed. 1997) 112-13.

26. *Republic* 438A. Simplicius is enlisting Plato's support, with a quotation from the *Republic* that does not quite match the received text, to show that the

difference between Aristotle's first and second definitions is one between *what is said* and *what is*. Cf. 198,20-3 and 199,35-200,3 and see C. Luna (1987) 137-9.

27. *Sophist* 255D.

28. Peripatetic philosophers of the first or second centuries AD. See Moraux II (1984) 211. Cf. Porphyry 111,22ff. and Ammonius 66,14ff. for briefer discussions of this point.

29. See C. Luna (1987) 136-7.

30. Ariston of Alexandria was a Peripatetic, and contemporary of Boethus (see n. 25). For Andronicus see n. 11. Eudorus of Alexandria, fl. 25 BC, was a Platonist; see Dillon (1977a) 114-35. Athenodorus of Tarsus was a Stoic, and a teacher of the young Augustus.

31. The citations from *Categories* which follow are: 6b2 (literal); 6b2-3 (non-literal); 6b15 (lit.); 6b16-17 (non-lit.); 6b17 (lit.).

32. *Cat.* 8a34 – again not quite a literal quotation. Simplicius' point is that the singular article *to* is to be taken with the infinitive *einai*, not with *pros ti*, which modifies *to einai*.

33. Kalbfleisch reads the singular *autêi khrêtai*, where the subject must presumably be 'the usual terminology', which leaves the *autêi* without any obvious reference. I suggest emending the text to the plural *khrôntai*, with 'the ancients' as the subject, and *autêi* referring to 'the usual terminology'.

34. *Cat.* 1b25.

35. *Cat.* 1b29.

36. Put in more Platonic terms, Relationship is a form unique in that, unlike the other forms, on each occasion that it is participated in it is of necessity participated in by a plurality.

37. *Metaph.* Book 5, ch. 15

38. Kalbfleisch, with an eye to the text of *Categories*, suggests that *kai aisthêsis kai epistêmê kai thesis* ('perception, knowledge and position') have dropped out of Simplicius' text; but he takes no account of the subsequent argument, which requires only the first two items.

39. This is a difficult paragraph, not made easier by Iamblichus' use of the particles *kai* and *de* in his lists. Simplicius asks (161,30ff.) what the basis of Iamblichus' classification is, and suggests that the different species correspond to the other categories; but he points out that (a) the correspondences are sometimes ambiguous, and (b) the list is not exhaustive. See also Eudorus' suggestion at 174,14ff., which seeks to relegate Relation to being an appendage of the other categories.

40. I have translated the Greek word *grammatikê* as 'literacy' – the field of the *grammatistês* in Greek and Roman education – although the more traditional translation is 'grammar'. It is the generic state 'knowledge' that is relative (to the object of knowledge or the knowable), not the species such as 'literacy' (which is not the literacy *of* something, hence not a true relative, but only one by reference *kat' anaphoran*. Cf.165,6); cf. *Cat.* 11a22ff.).

41. Or 'even if everything is reduced to what is spoken' (as William of Moerbecke in his Latin translation of the *Categories*, made in the thirteenth century).

42. cf.148,2ff.

43. Kalbfleisch follows one of the manuscripts in writing *heterôi* (dative case) for *heterôn* (genitive plural) of the majority of the manuscripts, when the meaning would be 'of some other thing or things'.

44. The genitive case in Greek is regularly used to express 'than' as well as 'of'.

45. The dative case in Greek regularly expresses 'by' as well as 'for' or 'to'.

46. As Aristotle at *Cat.* 6a37.

47. The Greek preposition is *para*.

48. By means of prepositions such as *pros* and *para*.

49. For Porphyry's discussion of this point see 112,6ff., and for Ammonius' see 68,5ff.

50. The definition should not contain the *definiendum* (or a synonym). Boethus is accusing Aristotle of a substitution of a name (*onomatos metalêpsis*); Simplicius denies this, claiming it is a general description (*hupographê*).

51. The manuscripts have *meros ti* (= 'a part'); Kalbfleisch reads *meropa* (a poetic noun = 'articulate/human being') from a marginal addition.

52. In this difficult passage Simplicius is asking what state and condition are relative to. His first suggestion relies on linguistic considerations: just as perception (*aisthêsis*) is relative to the perceptible (*aisthêton*), so state (*hexis*) may be relative to the havable (*hekton*) and condition (*diathesis*) to the conditionable (*diatheton*). His second suggestion, while still relying on linguistic considerations, goes a little further; state (*hexis*) may be relative to the haver (*ton ekhonta*) and condition (*diathesis*) to what is conditioned (*to diakeimenon*); there seems to be a distinction within this second suggestion between the active form 'haver' and the passive form 'what is conditioned'.

53. There appears to be a lacuna in the text; I accept the addition of *mallon* ('rather') from the hand b.

54. cf. Porphyry 112,32ff. and Steven Strange's note, in which he suggests that there *hektos* has an active sense, 'capable of having a state'. Simplicius' discussion here points firmly to a passive sense, 'capable of being had' – which would be regular for this type of adjective formed on the aorist passive stem of a verb.

55. Syrianus was the teacher of Proclus, head of the Athenian Academy in the fifth century.

56. Bodily states, such as health, are not directed towards anything in the way that the states of the soul, such as knowledge, are.

57. *Top.* 124b33, 125a33.

58. *Metaph.* 1022b4, where Aristotle distinguishes between *hexis* in the sense of possessing, and *hexis* in the sense of being disposed. In the argument of the rest of this paragraph Simplicius follows Aristotle closely. In one sense (a) virtue is a *hexis* (a state listed as quality at *Cat.* 8b25-9) which the soul 'has' just as a body 'has' a cloak; it has it by participating in it ('in virtue of participation' (*kata metokhen*) 164,16) because it needs it ('what is deficient' (*kat'elleipsin*) 164,19); when the soul has virtue in this sense it has it as a possession, and 'soul' and 'virtue' no more form a pair of relatives than 'body' and 'cloak'. *Hexis* in this sense is not *skhesis*. In another sense (b) the *hexis* is what is 'between the haver and what is had'; as Aristotle points out at *Metaph.* 1022b8-10 (echoed by Simplicius at 164,19-21), the soul does not 'have' the *hexis* when taken in this sense – that would cause a regress. *Hexis* in this sense is a *skhesis*.

The subject of the verb 'as they are accustomed to say' at 164,18 is not specified; they could be Peripatetics, or possibly Platonists and Peripatetics, both of whom use the language of participation; but Plato nowhere (except in *Letter 7*) uses the noun *metokhê*, whereas Aristotle does, e.g. at *Metaph.* 1030a13 (see Ross (1924) ad loc.).

59. There is a shift in the meaning of *pros* from 'relative to' to 'directed towards'.

60. *Cat.* 6b4.

61. i.e. white and warm are something other than relatives; cf. *Cat.* 14a8, where we are told that even if all things became white and there was no black, then white would still exist. Ammonius expresses the reverse at 63,22: 'In this way,

then, even if white didn't exist at all, black would remain', and continues, 'but if the father were taken away, the son would be gone'.

62. *Cat.* 6b11.

63. cf. *Cat.* 11a22ff. and n. 40 above.

64. As being part and whole substance, and parts of substances are arguably also substances (but see Irwin (1988) §138).

65. cf. Porphyry 113,23ff. and Ammonius 69,14ff.

66. *Cat.* 6b2.

67. Simplicius has changed the emphasis by taking the Greek word *kai* (meaning 'also' or 'too') with the phrase 'among relatives', rather than with 'such things' as in the text of Aristotle. Simplicius' point is that state, condition, etc. belong to more than one category, whereas Aristotle is merely adding to the list of relatives.

68. For a searching and full analysis of this passage, as far as 166,29, see M. Mignucci: 'The Stoic notion of relatives' in J. Barnes and M. Mignucci (eds), *Matter and Metaphysics*, Bibliopolis 1988, 129-221. Mignucci argues that this passage represents a refinement of the Stoic (so-called) doctrine of Categories, and makes a distinction between two kinds of relatives. It is not a reformulation of the four Stoic Categories, however attractive that suggestion might seem at first sight. Mignucci's main points are (a) that Simplicius is discussing general terms, not individual things, and (b) that at some point (possibly 166,10) the reference of 'relatives' (*ta pros ti*) changes; initially 'the relatively disposed' (*ta pros ti pôs ekhonta*) are a sub-class of 'what are relative to something', but later they are disjoint from them, in that they do not differentiate a thing intrinsically, whereas *ta pros ti* do.

69. The Greek verb *diatithenai* means 'to put into a certain condition, to dispose'. I have generally translated the cognate noun *diathesis* as 'condition', e.g. at 165,28. Simplicius is pointing out the difference between Aristotle, who at *Cat.* 9a29 places items such as 'sweet', 'bitter' among qualities, and the Stoics, who call them relatives. Cf. 237,25-238,2 below.

70. The commentary on LS 29C (vol. 2) reads: 'The precise force of *antestrammenê* here is unclear to us, although the terminology is evidently influenced by Aristotle *Int.* 13, 22a32-4. If, as one would expect, it means reciprocal, a negative should perhaps be added before it, since the "sequence of dependents" (= "the order of implications") which follows in 7-14 is in fact *non*-reciprocal; all *kath'hauta* are *kata diaphoran*, but not vice versa, and all *pros ti pôs ekhonta* are *pros ti* but not vice versa.'

Mignucci, however, translates: 'The order of the implications is reversed', and offers the following schema, 'where = = = represents the relation of contrariety, and the arrow inclusion':

per se	= = =	*pros ti*
↓		↑
kata diaphoran	= = =	*pros ti pôs ekhonta* (because of a difference)

C. Luna (1987) 117ff. says that for Simplicius Relation is a category composed of (i) a particular character (*kharaktêr*) and (ii) an inclination towards something else (*aponeusis pros heteron*) (cf. 292,30ff.). The character, which can belong to any of the other categories (167,10) acts as substrate (*hupokeimenon*) to the inclination, which is the formal aspect, putting *x* in relation to *y*. Simplicius here criticises the Stoics for thinking that there can be relatives consisting only in the inclination towards something else. Something cannot be whiter than something else without first being white. For him all relatives must be made up of a difference acting as

substrate (*diaphoran tina hupousan* 166,33) and a relation to something else (*tên pros allo skhesin* 166,33). The fact that in some relationships the difference (*to pros ti*) prevails, and in others the relation (*to pros ti pôs ekhonta*; cf. 167,37ff.) is not sufficient grounds for postulating two genera; the Stoic distinction is purely a linguistic one (166,30-1).

71. Mignucci translates 'belong to' on the grounds that 'co-exist with' (the more natural translation of *sunuparkhei*) implies a symmetrical relationship, which the argument precludes. David Sedley suggests: 'extend as far as'.

72. This passage = SVF 2.403 = LS 29C.

73. The Greek phrase *pros to ektos apoblepein* (to look outwards) seems to pick up *aponeuei pros heteron* (are directed toward something else) at 166,17. Both the items under discussion are similar in this respect, while they differ in others.

74. The commentary on LS 29C (vol. 1) reads: 'Sweet' is recognised as relative, in that to be sweet is to have such and such an effect *upon a perceiver*, but is also 'differentiated' in that sweetness is an intrinsic differentiation of a thing – and that puts it in the genus 'qualified'. Cf. 212,12ff.

75. See Mignucci op. cit. 68 for a discussion of this point.

76. See Sorabji, *The Philosophy of the Commentators* (forthcoming), '(ix) Aristotle's category of relatives and Cambridge change'.

77. Simplicius is showing how the characteristic (*kharaktêr*) which together with the inclination (*aponeusis*, but here designated rather confusingly as the relationship: *skhesis*) can belong to any of the categories (see n. 70 above).

78. cf. the Stoic doctrine that no two things can be the same.

79. Or 'the same things are not two, as they (the Stoics) suspect, but one, viz. the conjoint'.

80. For the Stoics each so-called category is derived from the one(s) above it. Simplicius is complaining that it is absurd to engender Relation out of Quality and Relation; but in fact the Stoics according to the mainstream tradition derived Relation (*pros ti pôs ekhon*) from Quality and the Disposed (*pôs ekhon*).

81. Referring to 166,3ff. Simplicius is attempting to show that 'what is relative to something' and 'what is in a relatively disposed relative to something' are not distinct categories; in other words Aristotle's refinement at *Cat.* 8a32 does not constitute a different type of relative. See Professor David Sedley's article 'Aristotelian relativities', in *Mélanges J. Brunschwig* (2000), where Simplicius is taken to task for failing to distinguish between what Sedley calls 'hard' and 'soft' relatives.

82. cf. n. 77; here again we have *skhesis* where we might expect *aponeusis*.

83. Iamblichus is seeking to contain all the different ways suggested by Aristotle in which a relationship can be had within a single genus.

84. Simplicius' conclusion depends on the distinction between characteristic and inclination.

85. *Ennead* 6.1.6.

86. For Plotinus' comments on the Heraclids see *Ennead* 6.1.3.3ff.

87. Frans de Haas comments: 'Simplicius condemns focussing *too much* on the level of different kinds of entities, thus splitting up the category of Relative, thereby overlooking that we are discussing a relation which *transcends* that level.' Simplicius takes Plotinus to task for failing to see that inclination transcends all relationships; cf. 173,7-11 and 174,8-12.

88. If, for example, it is 'nothing more than our judgement when we compare things which are what they in their own right' (Plotinus *Ennead* 6.1.6.22) or 'nothing more than ourselves thinking up the comparison' (*Ennead* 6.1.6.30).

89. Plotinus *Ennead* 6.1.6.3ff., and 6.1.7 where Plotinus is replying to such objections. The argument is developed at 173,1ff.

90. Simplicius presents five arguments (a)-(e), in the form of a *reductio ad absurdum*, against the proposition that Relation has no substantial existence. The fifth (e) is detached (at 169,29-31) from the others (a)-(d).

91. *EN* 1094a2.

92. Effectively the four Neoplatonic Hypostases, counting body (= Nature) as a sort of fourth Hypostasis. Simplicius' point is that if *skhesis* is eliminated, then there can be no unity (*henôsis*) or fellowship in nature (*sumphusis*) between things as disparate in substance and nature as body, soul etc.

93. Probably the mathematicals.

94. cf. Plato *Timaeus* 35Aff. and *Sophist* 254Dff. Simplicius bases his belief in the substantial existence of Relationship on the function of co-ordination.

95. Accepting Kalbfleisch's suggestion of *peri* for *pros* at 169,34.

96. Accepting Kalbfleisch's suggestion of the dative *tôi autôi* for the genitive *tou autou* at 169,34.

97. *EE* 1217b26ff.

98. *Metaph.* 1029b23, 1045b32, 1054a4 and 1069a19.

99. Plotinus *Ennead* 6.1.6-7.

100. Reading *epennoeitai* with manuscript J – a rare word; others read *epinoeitai* ('are conceived'), a word used three lines below. Cf. Plotinus *Ennead* 6.1.6.34: It is we who thought up 'on the right' and 'on the left'.

101. Nowadays known as 'Cambridge change', which is the characteristic of a true relative.

102. Simplicius is paraphrasing Plotinus *Ennead* 6.1.8 in the next few lines.

103. Of relatives some, such as 'equal' and 'like', have no external effect; others, such as 'sweet' and 'incisive', do have external effects, which themselves can differ.

104. This sentence ('Consequently … existence') is a near direct quotation from Plotinus *Ennead* 6.1.8.14-15; the meaning is that the son, who has come into existence (*to hupostan*) gives only a name to the father, whereas the father ('the other') gives substantial existence (*hupostasis*) to the son.

105. This passage seems to be a reformulation of the account whereby a relationship was seen to consist in (a) a characteristic (here designated as a difference) and (b) an inclination towards something else (cf. n. 69 above.)

106. The two Greek verbs *sumbainein* and *aposumbainein* are used as technical terms in Patristic texts: e.g. Athanasius accuses the Arians of believing that in God prudence and will and wisdom 'come-to-be in a mortal manner like a state that comes and goes as an accident'.

107. At 167,2ff.

108. Reverting to the question asked by Plotinus at the start of *Ennead* 6.1.6 and picked up in 6.1.8.

109. Simplicius uses the technical term *aph' henos kai pros hen* (lit: 'from something single and relative to something single') to denote the class of things intermediate between homonyms and synonyms.

110. Plotinus *Ennead* 6.1.6.

111. cf. Porphyry 125,17ff. C. Luna (1987) sees here a trace of the doctrine (found at Plotinus *Ennead* 6.1.8) that there are two types of relationship, an inactive (*argos*) one produced by participation in a form such as equality, and an active (*energês*) one which is accompanied by 'power and operation' (*meta dunameôs kai ergou*) such as father-son. Plotinus sees these relationships as homonymous and therefore unable to comprise a single category. Simplicius disagrees.

112. Kalbfleisch suspects a textual corruption, and suggests replacing *ekhonta* ('having') at 173,29 with *ekhei de ta genê*, which I have adopted. Simplicius is arguing against the Stoic way of thinking, which makes *skheseis* such as standing and sitting mere dispositions of bodies. Each so-called Stoic category is included in the one above it, and has no substantial existence of its own.

113. The manuscripts have *hexis hoplitôn* ('possession of infantrymen'); Plato at *Laws* 625C has the phrase *hexis hoplôn* ('possession of weapons'), which is perhaps what Simplicius has in mind here, and I suggest emending the text accordingly; perhaps the manuscript reading is the result of an error on the part of the scribe's seeing *Platôn* in the next line, and conflating the two words.

114. *Ennead* 6.1.6.32ff.

115. See C. Luna (1987). She says: 'Participation in the Form of Relationship is for Simplicius the sole cause of the coming to be of any relationship; he excludes all mechanical and extrinsic cause.'

116. When the person who was 'on the left' has moved away.

117. *logos* here seems to be something like the Stoic 'seminal reason' (*spermatikos logos*) which pre-exists and survives the thing in question.

118. *Cat.* chapter 10.

119. Virtue would still exist even if there were no vice, so it does not have its being in its opposition to vice in the way that half and double depend on the opposition between them for their being; see 163,30ff. above and Porphyry 114,3ff.

120. cf. n. 40 above.

121. *heteron* e.g. the virtuous person, as opposed to *allo* at 175,28, which refers to its opposite, vice.

122. Simplicius and Iamblichus (below) testify to this reading of *Cat.* 6b21, whereas the manuscripts have simply 'also more and less unequal'. The Greek phrases are: *anison mallon kai hêtton* ('more and less unequal') and *anisaiteron mallon kai hêtton* ('more unequal to a greater or lesser extent'; lit: 'more and less unequaller').

123. Intension (*epitasis*) and remission (*anesis*), together with latitude (*platos*) were terms used by the commentators to explain an apparent paradox: how can anything acquire different degrees of a quality which itself does not admit of degrees? Their answer was that the mixture of elements in a thing, through intension and remission in the mixture, allows a range or 'latitude' in the participation in the quality. See R.B. Todd, 'Some concepts in physical theory in John Philoponus' Aristotelian commentaries' Part 2, in *Archiv für Begriffsgeschichte* (1980).

124. In keeping with Iamblichus' 'more intellective approach'.

125. At 175,29.

126. cf. the doctrine of the Mean *EN* Book 2 chapters 6-8. The Stoics developed the doctrine that virtue was unitary, but vice manifold.

127. cf. Porphyry 125,17ff.

128. cf. 176,3-14.

129. Simplicius links understanding (*eidêsis*) to species (*eidos*), where there is some etymological link, and cognition (*gnôsis*) to genera, where the link is somewhat tenuous.

130. i.e. the relationships.

131. *An. Pr.* 59b11.

132. Supplying *ê ou kata pantos* according to Kalbfleisch's suggestion.

133. Or 'can be co-extensive with each other'.

134. *Cat.* 6b28ff.

135. Both these replies are, according to Boethius *in Cat.* PL64 224C-225B, from Iamblichus. The example is that of the beautiful and the good.

136. A concise summary of what Aristotle means by correlation.

137. Simplicius is drawing a distinction between the form of the Relative, which fits with Aristotle's revised definition at *Cat.* 8a32, and the particular feature of the Relative, viz. correlation. C. Luna (1987) says: 'The universality of the property of convertibility results from the fact that convertibility is based on inclination towards something else, which is the very essence of relatives, and which thereby represents their most universal property.'

138. Aristotle's second, improved, definition of relative at 8a31ff. is framed in terms of being, not saying [Ed.]. There appears to be some textual corruption here; perhaps the verb *koinônein* should replace the adjective *koinên*.

139. Reading *autos* for *autois*.

140. There appears to be another textual problem; I suggest supplying, in the lacuna in Kalbfleisch's text, *esti to de*.

141. cf. Porphyry 116,1ff. and Ammonius 71,9ff.

142. The Greek verb I have translated as 'to apply the correlation equally' is *exisazein*. It can be either transitive, as here, or intransitive as in the rest of the discussion ('to be equivalent' or 'to be co-extensive'). An essential feature of relationship is that neither of the two members in the relationship should have a wider (or narrower) reference than its correlate. If any item has a wider reference than its apparent correlate, then it is said to 'exceed' (*pleonazein* or *huperballein*), and the relationship is wrongly presented; similarly if it has a narrower reference it is 'deficient' (*elleipein*).

143. Simplicius has explicated Aristotle's meaning in rather a long-winded fashion, giving one example of the excess of the secondary term over the primary (i.e. wing is of wider application than bird) and one of the converse (i.e. vessel is of wider application than rudder). The third example, at 185,20ff. is ambiguous, depending on whether we allow that 'head' can be used figuratively, in which case the primary term 'head' is of wider application than 'animal' in one respect (more things than animals have heads, e.g. palm trees), but of narrower application in another (not all animals have heads, e.g. jellyfish), as Apollonius recognised (188,16ff.), although Simplicius dismisses such use of figurative language at 188,24ff.

144. The Greek word for 'in a substantial manner' is *ousiôdôs*, which could also be rendered as 'in an essential manner', i.e. it is not of the essence of a boat to have a rudder, since some boats lack a rudder but are none the less boats, e.g. 'certain river ferries' (184,32). Similarly at 185,24.25.26.

145. It is part of the substance (or essence) of a bird to have wings, since there are no birds that do not have wings; so in this case the correlation between wing and bird breaks down solely on the principle of non-equivalence. Cf. 186,19.

146. For a fuller discussion of this point see Aristotle *Phys.* Book 2 195a32ff., and Simplicius *in Phys.* 322,17ff. Aristotle's point there is that Polyclitus is only the *per accidens* efficient cause of the statue he makes; the *per se* efficient cause is the sculptor.

147. A puzzling addition, paralleled at 186,12. The subject of the two verbs seems to be 'slave', and the sense is that even if the slave continues to exist after, say, the death of his master, he is no longer a slave (on the assumption that he has been manumitted) and therefore not relative to any master. Cf. 170,16ff. In the case of the wing at 186,12 the meaning then would be that in the absence of anything winged, the wing would not be a wing *qua* relative, except perhaps homonymously. (*Metaph.* 1035b14-25, 1037a30-2).

148. The Greek word is *onomathetês*, modelled on *nomothetês* ('lawgiver'). The assumption is that at least some of the words in the language are deliberate creations on the part of some 'wordgiver'.

149. Serious etymology seems to begin in the fifth century BC with Plato's *Cratylus*, and was a popular pursuit of both amateurs and professionals throughout the classical period – although often fanciful and inaccurate claims were made.

150. The original meaning of the Greek word *kentron* is 'a [sharp] point'.

151. For a full discussion of the nature-convention antithesis see Guthrie (1971) ch. 4.

152. In this passage, as far as 188,6, Simplicius seems to be drawing a distinction between a level of relationship in which the two members are co-ordinate, and one where the two members are linked constitutively; to denote the former he uses the terms *suntattesthai* ('to be co-ordinate') and *suntaktikos* ('co-ordinate'), and to denote the latter *sustasis* ('constitution') (except at 187,23, for which see next note).

153. For Aristotle's views on the 'primary imposition/composition' of words see *Int.* chs 1-3, 16a1-16b25. P. Hoffman (1987) says: 'The primary imposition causes the categories to emerge. The second expresses the distinction between nouns and verbs.' Cf. Porphyry *in Cat.* 57,20-58,5.

154. *Cat.* 8b22; Aristotle later questioned whether parts of a substance were substances at all: *Metaph.* 1028b9-10.

155. See *Metaph.* 1035b23 and *DA* 412b20 for Aristotle's (later) view that a severed part such as a hand is no longer a hand except homonymously; cf. Irwin (1988) §30.

156. *Cat.* 7b8. In fact, Aristotle says 'the wing will no longer be among things that are relative to something' if we make the wrong correlation.

157. A grammarian of the second century AD.

158. A slight misquotation of *Cat.* 7a1.

159. *Cat.* 7a17.

160. The ensuing discussion reveals the ambiguity between *kosmos* as 'the material universe' and *kosmos* as 'immaterial order'.

161. The three Greek words I have rendered as 'the ordered', 'the earthy' and 'the airy' are *kosmôtos, geôtos* and *aerôtos*, and are not found elsewhere (according to LSJ); they seem to be modelled on Aristotle's *pterôtos* (winged), and LSJ offer 'made into a world' as a translation of the first (they do not list the other two); so we could perhaps translate them rather clumsily as 'that which is made into a world', 'that which is made into earth' and 'that which is made into air' respectively. Ariston's point is that in none of the three cases – the cosmos and the two active elements – is the relation between part and whole as it is in the case of wing and winged, but the use of the genitive '*of* the ordered' suggests a reciprocal relation like that of wing and winged.

162. cf. Porphyry 117,35ff. and Ammonius 73,22ff.

163. Because primary genera cannot be referred to anything higher than themselves for their definition; cf. 190,25-9.

164. *Republic* 438B.

165. Although the sun cannot exist without shining, and although there can be no sunshine without the sun, even so they are not relationally co-existent according to the criteria established.

166. The point seems to be that the sun and sunlight co-exist in such a way that they both enjoy and lose their substantial existence together. If there is no sunlight there can be no sun, not even under another name; but when the son dies, the father does have substantial existence (but under another description e.g.

Socrates) so that his substantial existence is not 'on an equal basis' with that of his son – as is the case with the sun and sunlight. There are, however, cases where both members of a relationship do come and go together e.g. double and half.

167. *Cat.* 7b22.

168. cf. *in Phys. 2* 327,6 and n. 247 ad loc. Philo the dialectician seems to have been the person who put the question in the form: 'Is the shell at the bottom of the sea visible?' See Sorabji (1983) 90-3.

169. For Aristotle *Nous* is always fully actualised (*Metaph.* 1072b13ff.).

170. *Ennead* 1.1.8 and 2.5.3.

171. B. van den Berg has shown that Iamblichus thinks a few perfect souls have the unextended status which Plotinus associates with all of us; see *Analecta Classica 8* (Proceedings of the Liverpool Conference on Iamblichus).

172. *Cat.* 14a26ff.

173. Simplicius is making a distinction between (a) relatives, the removal of either of which necessarily involves the removal of the other, and (b) things that are prior and posterior by nature, where the removal of the prior necessarily involves the removal of the posterior, but not *vice versa*. The distinction is reinforced by the two terms 'removal' (*anairesis*) and 'removal with itself' (*sunanairesis*).

174. Lit: 'brings along with itself' (*sunepipherei*).

175. cf. Porphyry 120,7ff. The problem of squaring, or 'quadrature', of the circle is, in Porphyry's words at 120,7ff., 'whether the area enclosed by a circle could also be enclosed by a square'.

176. Reading *helikoeidous* for *Lukomêdous*.

177. Porphyry 120,14ff.

178. The *ekpurôsis*, whereby every 10,000 years the cosmos was consumed in flames only to re-emerge and repeat its course exactly; see LS §§46, 52. This doctrine of everlasting recurrence of course post-dates Aristotle.

179. *Cat.* 7b38-9. Aristotle is, perhaps, using the term 'body' in the narrower sense of 'the body of the living creature', while Simplicius is using it in this paragraph in its broader sense, 'the corporeal'; the discrepancy does not prejudice the argument. The Loeb translation of 7b38-9 in fact reads: 'For the act of perception implies or involves, first, a body perceived, then a body in which it takes place.'

180. Plato *Laws* 653A.

181. At birth we know nothing, but we have immediate perception of things around us.

182. They exist, but not as objects of knowledge, perception or cognition.

183. *Metaph.* 1010b30ff.; cf. *DA* 417a9, 426a23.

184. The distinction between first and second potentialities, explored especially in the *DA* passages cited above and *Metaph.* 1019a33ff.

185. The eclipse certainly existed before either the Greeks or any non-Greeks knew about it (in the sense of being able to predict it, as Thales is said to have done), but it was not an object of knowledge and thereby not a relative before the knowledge.

186. The Unmoved Mover (= Intelligence) of Aristotle *Metaph.* 12.7, or else *Nous*, the second Neoplatonic Hypostasis.

187. cf. Porphyry 121,16-19: '**Q.** How can you claim that the object of perception does not exist when there is no perception of it? **A.** Because, for example, if perception does not exist, honey exists, but it is not capable of being tasted, and white exists, but it is not visible, since there is no sense of sight.'

188. Reading the accusative *to* with the manuscripts. If we accept Kalbfleisch's suggestion and read the dative *tôi*, then the meaning will be: 'in addition to holding …'.

189. e.g. white and non-white.

190. i.e. state and privation.

191. Philo the dialectician, fl. fourth to third centuries BC, a pupil of Diodorus Cronus; cf. nn. 168 & 193.

192. i.e. Knowledge.

193. Diodorus Cronus, fl. fourth to third centuries BC, the teacher of Zeno of Citium and Philo the dialectician.

I suggest adding the definite article *tou* after *ennoian* to make the participle *krinontos* agree with *Diodôrou*, so reading *tou autêi têi ekbasei.*

194. A paraphrase of *Cat.* 7b30: 'but even if there is no knowledge that does not mean that there can be no object of knowledge'.

195. We need to supply the additional premiss: 'and if primary substances are relative (the particular man being a typical primary substance)'.

196. Simplicius' seems to be suggesting that we cannot therefore make such a predication, in keeping with Aristotle's doctrine. But perhaps he is alluding to a phrase such as 'a man of wisdom'; cf. 201,20 where Socrates is said to be 'of the god'. But this is hardly a relationship.

197. See Sedley (2000) who shows that the rule of cognitive symmetry rules out parts of secondary substances as relatives.

198. A paraphrase of *Cat.* 8a13-15.

199. *haplos*, i.e. as secondary substance.

200. cf. Porphyry 123,5ff.

201. *Cat.* 8a28-30 (with minor changes).

202. The first definition at *Cat.* 6a37.

203. If Professor Sedley is right, Simplicius has missed the point of Aristotle's second definition.

204. On the assumption that parts of substances are themselves substances.

205. The manuscripts have *pleonazei* (embrace a wider field), which makes little sense here; perhaps the scribe wrongly copied from *pleonazon* in the line above; Professor Sedley suggests *pros ti neuei* (incline towards something), which makes good sense.

206. cf. Porphyry 125,6ff. and n. 403 ad loc.

207. *Cat.* 8a35.

208. *Metaph.* 1039a14ff. and 1042a13ff.

209. *Cat.* 8b11-12.

210. *Cat.* 8b20-1.

211. *Cat.* 8b21-3.

212. In that all relatives are *per accidens*.

213. Typical paradoxical Neoplatonic language such as is found at Plotinus *Ennead* 3.6.1.33 – 'irrational reasonings … unaffected affections'. The phrase 'unrelated relationship' (*askhetos skhesis*) is found at pseudo-Alexander *in Soph. El.* 152,24.

214. cf. Porphyry 123,33ff.

215. 163,28.

216. The Greek *to leukon* can mean either 'whiteness' or 'the white thing'.

217. i.e. when they are considered as double and half.

218. The Greek phrase is *ta autou*, which could equally well mean 'what was said there'; Kalbfleisch suggests 182,11, 190,12 and 198,30. It does not apparently square with anything Aristotle says in *Categories*.

219. cf. n. 40; justice is a part of virtue, so is only a state (*hexis*) by reference (*kat' anaphoran*) to the genus.

220. At 65,13.

221. Or possibly 'a principle'.

222. Relation is not one of Plotinus' intelligible categories.

223. For example at the start of Simplicius' commentary on *Cat* chs 6 and 7.

224. At 121,13. See F. de Haas and B. Fleet (2001) ad loc. The reference seems to be to the same work as that used by Ammonius, of whom Professor Sorabji says: 'and he is taken in by a pseudo-Pythagorean treatise on categories, probably from the first century BC, which purports to come from Archytas. Since the real Archytas preceded Aristotle, this gives Ammonius the impression that Aristotle did not invent the scheme often categories, but merely gave it its particular order.' (In the Introduction to S.M. Cohen & G.B. Matthews (1991) p. 4.) See also n. 6 above.

225. For Eudorus see n. 30 above.

226. As opposed to intelligible substance, although he should exclude also secondary sensible substance, which is not 'somewhere and at some time'.

227. As opposed to Substance according to the matter. Cf. the discussion in Aristotle *Metaph.* Book 7.

228. The definition by measure is in terms of the quantity, and relates more to Substance according to the matter.

229. Kalbfleisch suspects a corrupt text at this point, which reads 'Why does Archytas … say' without stating what he does say; I have accepted his emendation.

230. Surprising, in that for Aristotle the formal is prior to the material, and Simplicius here is suggesting that Quantity is more closely allied to the material than to the formal. See n. 8 on ch. 6 of F. de Haas and B. Fleet (2001) and cf. 206,23-4 below.

231. Or: '… is prior to Quality in conception'.

232. Simplicius is making the suggestion that if matter is distinct from Quantity, then Quantity must be immaterial, i.e. formal. The Greek word I have translated as 'entirely' is *holôs*, which could alternatively be rendered as 'in general'.

233. Figure (*skhêma*) is included among the fourth type of Quality at *Cat.* 10a11.

234. It is especially in his commentary on this chapter that we see Simplicius' concern to harmonise Aristotelian and Platonic thinking. In the pursuit of such harmonisation, later Platonists were not alone in exploiting and expanding the range of meaning of certain words, in particular that of *logos*, which 'because of its different meanings and its adaptability is one of the most difficult words in Greek of which to give a philosophical definition' (Atkinson (1985) 51). In fact, in this chapter there are three such terms in play – *eidos* ('form' and 'species'), *poiotês* (quality) and *logos* – all of which play a key role in explaining how forms come to be instantiated in matter, always a problem for a Platonist.

Forms can be viewed from two aspects, first *qua* self-subsisting Beings (*onta*), entirely in the Intelligible World as described, for example, by Plato at *Timaeus* 52A, and secondly *qua* 'that which is participated in' (*metekhomena*). It is in the second of these aspects that we are concerned with in this chapter; forms *qua* 'that which is participated in' are effectively qualities, and qualities are effectively enmattered forms.

At 206,17 above Simplicius has already hinted that 'Quality is a kind of form and shape in substance', though elsewhere he points out that a quality is not a form. He makes the distinction between the two aspects of form at 218,30ff.

A further point is that Simplicius follows Aristotle in using the word *eidos* to refer not only to forms, but also to species, which is far less problematic for an Aristotelian than for a Platonist. See further Irwin (1988) ch. 12. It is not always clear in which sense Simplicius is using it.

Qualities, according to the dynamic Platonic description of *Timaeus* 50C, are properly 'copies of the eternal realities passing in and out <of matter>'. Their status is ambiguous. At the highest ontological level, as we have seen, they are to be equated with forms; but in that they are only to be seen in terms of participation by, and 'descent' into, matter, they lack the separate existence of forms. At an intermediate level they are 'the copies, etc.'. At the lowest enmattered level they are the perceptible qualities of individual substances, 'that by which we are qualified' (218,28f.). Whether these include accidental as well as essential qualities was a topic of debate among ancient philosophers; see Lloyd (1990) 93-4.

Logos in broad terms appears to be the principle of relationship between priors and posteriors, e.g. the principle by which the forms receive their expression in matter as qualities. The concept was developed especially by Plotinus. In his discussion of *Ennead* 5.1.3.7ff. (Atkinson (1985) 50-4) distinguishes three levels: (i) *logoi* (the plural) in Intellect = the forms; (ii) *logoi* in the soul = the forms in a more divided or differentiated state through the operation of the discursive thinking (*dianoia*) of the soul, and (iii) *logoi* in matter = the enmattered forms. Plotinus uses the singular (*logos*) on occasions in a rather different sense. Soul, he says (*Ennead* 5.1.3.8), is 'the *logos* of Intellect', and (*Ennead* 2.7.3.12) 'body is matter and an indwelling *logos*'. We could, perhaps, refine this to saying that just as soul is the *logos* of Intellect, so Nature (which Plotinus seems on occasions to elevate to the status of a fourth Hypostasis below the One, Intellect and Soul) is the *logos* of soul. Atkinson (op. cit. 54) summarises: 'The concept of *logos* is a complex one, but the key notion is that of "expression". Hence the word comes to be used both of the subject of "expressing" (i.e. Intellect and soul), and of the objects "expressed" (the *logoi* in soul and matter).'

It is possible that Plotinus and the Neoplatonists were influenced by the Stoic distinction between *logos* in conception (*endiathetos*) and *logos* in expression (*prophorikos*); see Graeser (1972) 35, 41-3.

Further distinctions between *logos*, quality and form are made at 222,1-39 and 249,35-250,30, and distinctions within *logos* at 289,8ff.

Logos in the above sense can be rendered as 'reason principle' or 'productive principle'; it has, of course, many other connotations such as 'reason', 'account', 'proportion', and 'word'. It is not always clear in which sense Simplicius is using it. I have chosen to leave it untranslated when I consider that it is being used in the above sense, and to put it in brackets after the translation in other cases where there is any ambiguity.

See further Corrigan (1996) 110-13, Rist (1967) ch. 7 and Lloyd (1990) 92-5.

Simplicius' point here is that qualities can find their expression, i.e. as *logoi*, only in a *quantum*; therefore, quantity (both *per se* and relative to something) is prior to quality.

235. *Cat.* 3b29ff.

236. *Cat.* 5b15.

237. *Cat.* 6b2.

238. cf. Porphyry 127,1ff.

239. These are the four elemental qualities; see Aristotle *GC* 329b7ff.

240. Plato appears in *Phaedo* and *Symposium* to posit the self-predication of forms, although at *Parmenides* 131E-132B this is questioned – hence the lengthy debate on the so-called 'Third Man Argument'. Here self-predication is assumed in order to save the duplication of categories.

241. Achaicus was a Peripatetic philosopher of the first or second century AD.

242. For Alexander of Aphrodisias see Appendix: The Commentators, pp. 189-90.

243. *Metaph.* 1020a33ff.

244. e.g. 65,2, 155,4.

245. *Theaetetus* 182A.

246. Antisthenes is described by Tredennick as 'The Cynic; contemporary and renegade "disciple" of Socrates'.

247. See below 217,32ff.

248. cf. Plotinus *Ennead* 6.3.8.23-30.

249. See Lloyd (1990) 93-4.

250. Accepting Kalbfleisch's emendation *ton pleiston sumbebêken* (after *epei de*).

251. cf. Porphyry 137,30 and n. 7 on ch. 6 of F. de Haas and B. Fleet (2001).

252. There appears to be a variation of expression: the other members of the list (concepts, states, cases) are characterised by adjectives (havables, participables, bearables), while 'predicates' are characterised by a noun (*sumbamata* which LSJ give as a Stoic equivalent of *katagorêmata* = 'complete predicates'). See further R. Gaskin, 'The Stoics on cases', 104 n. 35, in Sorabji (ed.) (1997).

253. The MSS have *parabolên* ('juxtaposition') emended by Brandis to *probolên* ('being on one's guard'; cf. 212,19), whereas Aristotle at *Cat.* 6b11 has 'lying, standing and sitting'; I suggest therefore emending the text to *stasin* ('standing').

254. Either Antipater of Tarsus, a second-century BC Stoic, successor to Diogenes as head of the school in Athens (152-129 BC), or possibly Antipater of Tyre, a first-century BC Stoic.

255. Perhaps a reference to Stoic *spermatikoi logoi*.

256. I have translated the Greek word *phronêsis* here as 'wisdom'. Professor Sorabji suggests that it could be either the accidental form 'wisdom', or the substantial form 'rationality'. He assumes that the 'first cause' in the following line refers to the Aristotelian form. Cf. 224,5-7 for the distinction between inborn and acquired wisdom/ rationality.

257. As Platonic and Aristotelian forms respectively.

258. As outside observers.

259. Reading *tou* (the definite article taken with *peri hêmas* = 'what is to do with ourselves') for the *pou* of the MSS.

260. Not as outside observers.

260a. See 214,24-31; cf. Dexippus *in Cat.* 50,31.

261. The definition should not contain the *definiendum*.

262. *Theaetetus* 182A.

263. Aristotelian and Platonic causation respectively.

264. Simplicius has in mind the fact of participating as that which inheres in a substrate alongside the quality (though *its* inherence is caused by the inherence of quality and so is posterior in the causal order).

265. Adding, with Kalbfleisch, the article *to* before *auto*.

266. 212,12-213,1 = LS 28N.

267. 'Distinguished by some intrinsic feature, as opposed to *pros ti pôs ekhon*' (LS).

268. The Greek word, accepted by Kalbfleisch from MS L, is a bi-form of *ekhomenon*, and seems to engender the noun *skhesis* (here = 'condition' as in 212,18). LS point out that *kinoumenon* and *iskhomenon* represents the standard Stoic distinction between processes and states.

269. *Ennead* 6.1.10.

270. Reading *homoiôs* for the MSS *homôs* ('nevertheless').

271. By 'the potential' and 'the actual' Simplicius seems to be referring to 'the quality' and 'the qualified' respectively, where the former lacks a homonymous name.

272. For Andronicus of Rhodes see n. 11 above.

273. 214,24-37 = LS 28M.

274. Spirit (*pneuma*) for the Stoics is the active material force pervading the cosmos; each item in the cosmos possesses some portion of it.

275. cf. *in Phys.* 671,9.

276. The Stoics would deny that form is bodiless, whereas for both Platonists and Aristotelians form is bodiless – an axiom which underlies Simplicius' argument in the rest of this paragraph. The Stoics agree that there can be something qualified which is made up of separate parts, such as a chorus, provided that it has some inherent unity, such as 'co-operating towards a single function'. What is it, then, that makes it a qualified entity? It cannot be anything incorporeal like a relationship, since a substance, even a qualified substance, cannot get its being from something incorporeal, according to Stoic belief. Yet a quality, in that it is bodily, cannot be present as one and the same, to a number of separate parts. Therefore the Stoic position is untenable.

277. Perhaps an allusion to the Stoic 'containing' or 'cohesive' cause. See B. Fleet (1997) 177 n. 243.

278. 'Divorced' in Greek is *dioikismenos*, again perhaps Stoic terminology; *oikeiosis* ('affinity') plays an important part in Stoic doctrine.

279. Or possibly 'the other categories'.

280. Iamblichus (*c.* 250-325 AD) was a Neoplatonist whose commentary on the *Cat.*, quoted extensively by Simplicius in this commentary, is lost. It was itself based on Porphyry's lost commentary entitled *To Gedalius* (*ad Gedalium*). Simplicius on several occasions refers to Iamblichus' interpretation of the categories as 'intellective' (*theôrêtikos*). See Dillon (1997a), esp. p. 77: 'It will be seen that it is Iamblichus' purpose to salvage Aristotle, reconciling him both with his perceived doctrine elsewhere (as, for example, in the *Metaphysics* and *Physics*), and with that of Plato and the Pythagoreans. The aim is to establish a metaphysical framework for the interpretation of the *Categories*, revealing the hidden levels of truth within it.'

281. i.e. qualities are more than universals.

282. The School of Eretria was founded by Menedemus around the beginning of the third century BC; he transferred the school of Phaedo from Elis to Eretria.

283. Dicaearchus (*fl.* 320 BC) was a pupil of Aristotle.

284. Theopompus, better known as an historian, was said to have been an anti-Platonist.

285. Kalbfleisch suspects some textual corruption, but offers no more than *non intellego* ('I don't understand'). I have (following MS L) removed *men* in 216,20 and *te* in 216,21, and changed *homoiôs* in 216,20 to *homônumôs*.

286. A difficult passage, but Simplicius, following Iamblichus' intellective lead, is claiming a causal role for qualities in that they are not mere predications, but exist on a formal level prior to their instantiation in particulars.

287. cf. 212,25-33 above, where Simplicius quotes the Stoic distinction between the person possessing a quality and the person actually using it – a reflection of the distinction between first and second actuality made by Aristotle at *DA* 417a22ff.

288. Simplicius' criticism of the Atomists is twofold. First, they are inconsistent in allowing only a limited range of qualities (designated as differentiae) as innate to atoms. Secondly, they can offer no causal explanation for either these innate qualities or for any other supervenient 'havable'.

289. Possibly a pun – the atomists had no bottom to their universe, and the atoms were constantly falling downwards.

290. A reference to other Presocratic theories of cosmogony from opposites or contraries.

291. Presumably the etymology.

292. 217,21-5 = LS 29G, with the note: 'Simplicius is discussing certain Academics … whose views seem to be a synthesis of Stoic and Platonic metaphysics … The fact that these heirs to Stoic ontology were left in some perplexity as to the difference between *poion* and *pôs ekhon* underlines the Stoics 'lack of clarity on the point'.

293. Going against the traditional Stoic doctrine whereby (of the so-called categories) *to poion* includes *to pôs ekhon*, which in turn includes *to pros to pôs ekhon*.

294. The MSS have *hupostasin* ('existence'), which sits uneasily with the preposition *peri* before *ton eidon* ('the forms'); Kalbfleisch suggests *hupothesin* = 'the hypothesis about the forms'. If we accept this, it might be sensible to read *hupostaseôn* for *hupotheseôn* in 217,30 = 'at the level of the primary hypostases'.

295. 217,32-218,1 = LS 28L.

296. Stoic bodiless entities are void, place, time and sayables (*lekta*).

297. Stoic *pneuma* is bodily.

298. The Greek word is *eidopoiein*, which means either 'to produce species' or 'to endow with form'. Aristotle does not, of course, use the term *logoi*. Simplicius is putting words into his mouth.

299. As the soul at *DA* 408a31 is said to move when the body in which it resides moves.

300. The Greek word *exeirêmenos* ('separated') can also be translated as 'transcendent'. Simplicius is establishing a hierarchy of (Platonic) form, quality and qualified thing. Each gets something from what is above it, and gives to what is below it without being diminished; the principle of transmission is the *logos*.

301. Omitting the second *aph'* in line 33.

302. A denial of the Stoic distinction between *logos endiathetos* and *logos prophorikos* (see n. 234 above and Atkinson (1985) 56-8).

303. These are characteristics of Form *qua* quality.

304. cf. Plotinus *Ennead* 3.8.2.25ff.

305. Latitude (*platos*) was a term used by the commentators to explain an apparent paradox: how can anything acquire different degrees of a quality which itself does not admit of degrees? Their answer was that the mixture of elements in a thing, through intension and remission (*epitasis* and *anesis*) in the mixture, allows a range or 'latitude' in the participation in the quality. See R.B. Todd, 'Some concepts in physical theory in John Philoponus' Aristotelian commentaries', *Archiv für Begriffsgeschichte* 24 (1980).

306. In the way that soul for Plotinus takes concern for the material world. Cf. Plotinus *Ennead* 4.8.5.24ff.

307. Or possibly 'said according to differentiae'.

308. Kalbfleisch suspects a textual corruption here, since we would expect some phrase such as '… or in individual senses', so suggests adding *idion hos* between *to* and *sunônumos*. Cf. Porphyry 128,19ff.

309. Simplicius suggests two applications for the phrase 'spoken of in several ways': (a) quality (as signification) can be referred to all categories when it is equivocal; and (b) quality can be referred only to its own category, in which case it is univocal. Simplicius (at lines 16-17) says that Aristotle opts for (b).

310. They seem to suggest that quality *qua* differentia is common to all the categories in that the species within any category/genus is determined according to a differentia.

311. *Metaph.* 1003a33, 1060b32.

312. i.e. the (Platonic) form.

313. 222,30-3 = LS 28H, who notes: 'A common quality is, in physical terms, a portion of breath in Socrates that makes him a man. If it is asked in virtue of what this breath is describable as the quality "man", the answer will be that it corresponds to the universal concept "man". That concept is not something present in Socrates; it is our own mental construct, a convenient fiction.'

314. At *Ennead* 6.1.10 Plotinus suggests that qualities might be powers in two different senses. First, 'a capacity that equips anything with states, conditions and physical powers so that whatever possesses it has the capacity that it does have'. But he rejects this possibility on the grounds (amongst others) that it leaves no room for incapacities. Secondly, 'a capacity that adds being qualified to substances posterior to them', so that (he concludes) only non-essential 'acquired' properties such as an ability to box will be qualities; essential properties such as reason will be *logoi*. Simplicius exploits this distinction in what follows, exploring the possibility that essential properties 'that complete the substance' are not qualities, while acquired properties are. At 224,1ff. he makes the further suggestion that the rational can be in one sense an inborn property, in another an acquired quality, echoing Plotinus at 6.1.10.16-19.

315. See F. de Haas (1997) 201-9.

316. These are Plotinus' exact words at 6.1.10.19-20, whereas the following 'quotation' at 224,19-21 is a paraphrase.

317. For the intermediate arts cf. Stobaeus vol. 2 (Wachsmuth) 113,24-114,3, where examples of such art are 'being protreptic', being persuasive' and 'being good at spotting'. I am grateful to Professor Sorabji for this reference.

318. cf. 208,17.

319. *Cat.* 9a15-16.

320. Hippolytus, the eponymous hero of Euripides' play, refrained from all sexual activity.

321. The Greek is ambiguous. An alternative rendering could be: 'nor are all capacities productive of what is unusual'.

322. As explained in the next paragraph, Aristotle could be accused of a faulty method of division, hence weakening the claim that Quality is a genuine genus. Simplicius sets out to set the record straight.

323. *Politicus* 262B, 265A, 287C.

324. But cf. n. 90. Simplicius is now ignoring the distinction made by Plotinus between acquired qualities and innate *logoi*.

325. *Cat.* 9b13; cf. *EN* 1128b10ff.

326. An interesting distinction between figure (*skhêma*), which is presumably of inanimate things such as triangles, and shape (*morphê*), which Simplicius here says applies to animate or ensouled things.

327. The reference seems to be to *Cat.* 9b9ff. where Aristotle makes a distinction between temporary colourings, such as blushing, and the natural colouring of a person's complexion.

328. The confusion arises from the fact that the word *genos* can be used in the strict sense of 'genus', or more loosely as 'type, sort'. Simplicius understands Aristotle to be using it in the stricter sense at 9a14, although most translators of *Cat.* seem to take it less strictly. The two phrases occur at *Cat.* 8b26-7 (where he uses the term *eidos*), and 9a14 (where *genos* is used).

329. cf. Porphyry 129,5ff.

330. cf. Plato *Timaeus* 67E and Aristotle *Metaph.* 1057b8.

331. Professor Sorabji comments: 'Porphyry took over from the Stoics, with

Boethius' approval, the idea that individuals are distinguished by a unique bundle (*sundromê*) of accidental characteristics (Porphyry *Isag.* 7,19-8,3: *in Cat.* 129,8-10; Boethius *in Isag.(2)* 235,5-236,6; *in Int.(2)* 136,17-137,26; 138,18-19; *On the Trinity* 1 lines 24-31). Rival views were that matter and material circumstances individuated (Alexander *DA* 85,15-16; 90,2-11; *Quaest.* 1.3 7,32-8,5; *in Metaph.* 216,3; Ammonius *in Isag.* 60,19-21); or that separation was needed in order to produce countability (Dexippus *in Cat.* 30,20-4).'

332. *Cat.* 8b30-1.

333. *Republic* VII 533B-C.

334. See n. 81 above.

335. I suggest adding *tis ei* (rather than Kalbfleisch's *tis eie*) since *kan* = *kai ean* in 229,35 requires a subjunctive rather than an optative.

336. Arrian's *Parthica* does not survive; cf. Plutarch *Life of Antony* 45.

337. This seems a fine distinction between 'hard to displace' (*duskinêtos*) and 'not easy to displace' (*ouk eukinêtos*), perhaps reflecting the distinction between 'the capacity for not being easily divided' and 'the incapacity for being divided' at 242,24ff.

338. At 229,25.

339. Aristotle's words at *Cat.* 9a5-7 are slightly different.

340. *Cat.* 9a10-11.

341. The Greek word is *diakeitai*, which is linguistically linked to the noun *diathesis*.

342. These qualities are not amenable to latitude (*platos*); you don't become more blue-eyed or more snubnosed.

343. For Syrianus see n. 55 above.

344. Nicostratus was a second-century AD Platonist.

345. cf. Plato *Euthyphro* 11Eff. where Euthyphro is criticised by Socrates for suggesting two such levels of justice.

346. *Metaph.* 1058a29ff.

347. cf. Plato *Philebus* 23Cff. for the indeterminacy of the more-and-less.

348. As in *Euthyphro* above (n. 121).

349. *Metaph.* 1022b1.

350. The relative pronoun (*hos*) added by Kalbfleisch.

351. *Cat.* 9a28ff.

352. *Cat.* 9b33-4.

353. *Cat.* 8b33.

354. 132,12; Steven Strange (1992) n. 457 notes: 'That is, when I perceive the heat given off by a body that has the capacity to produce this perception in me, i.e. possesses the affective quality, is my feeling its heat the same thing as my receiving the *condition* of being heated?'

355. Theophrastus succeeded Aristotle as Head of the Peripatetic school. This is quoted as Fr. LXXII (ed. Wimmer).

356. The point seems to be that just as in the case of the cubit, where there is no specific difference between the form of cubit and its various more or less exact instantiations in matter, so there is no specific difference between anger pure and simple and different types of anger (to which we give different names) manifested in enmattered natures. Intension and remission, whatever the degree of latitude, are not specific differentiae.

357. A paraphrase of *Ennead* 6.1.11.1-5.

358. *Cat.* 6b22-3.

359. *Cat.* 9a4-6.

360. At *Cat.* 8b29ff. Aristotle gives examples of states (the sciences and the virtues) and conditions (heat, cold, disease and health).

361. For Eudorus see n. 30 above.

362. The MSS have *eiper* ('since'), whereas the MSS of *Cat.* have *eisi de* ('and are'). I suggest reading *eipen* ('said') with Aristotle as the subject and *phesi* with Eudorus as subject.

363. Eudorus is drawing an analogy here, not offering an example.

364. Euripides *Medea* 1078-9.

365. i.e. reason, habituation and nature.

366. *Cat.* 8b35-6.

367. 237,25-238,20 = LS 47S; cf. Porphyry 137,27ff.

368. *Cat.* 8b27.

369. The Stoics use the term *skhesis*, which Simplicius and the other commentators generally use to denotes relationship, to mean either 'disposition' or 'state'. LS (note to 30G) point out that the former derives from the active form of the verb *ekhein* which (when used with an adverb) means 'to be disposed', while the latter is derived from the passive *ekhesthai*, meaning 'to be held'.

370. Molossian hounds were well known for their ferocity, e.g. Plautus *Captivi* 18. Simplicius is suggesting that they fail to match up to the ideal of caninity.

371. Kalbfleisch reads *daktulios* which means 'ring', and could refer to some immovable part of the thumb-screw; I suggest *daktulos*, 'thumb'.

372. cf. *in Phys.* 1224,6.

373. Qualities get their apparent differentiae because of a deficiency in the nature of particular substances.

374. Accepting Kalbfleisch's suggestion of *eien an* for *eipen hoti*.

375. At 229,12.

376. *Metaph.* 1022b1.

377. *Metaph.* 1022b4.

378. The Greek word I have translated here as 'possession' is *hexis* – the term for 'state' throughout this passage.

379. Perhaps Simplicius is thinking of the *megista genê* of Plato's *Sophist* 254Bff. – Sameness, Difference, Rest, Motion and Being.

380. At 225,1.

381. The Greek for 'with an aptitude for boxing' is the single word *puktikos*. My rather laboured translation seeks to get the right shade of meaning here without using terms such as 'propensity' which are used to render other Greek words. Aristotle is talking about the person who has a not yet fully developed potential for anything, contrasted at *Cat.* 10b2 with trained boxers (*puktikoi … hoi kata diathesin*). Later, at 243,2ff., I have used phrases such as 'with the makings of a boxer'.

382. cf. *SVF* 1.566: [Cleanthes says] All men have natural tendencies to virtue (=LS 61L).

383. e.g. Aristotle at *EN* 1151a18.

384. There appears to be a lacuna in the text; I suggest *hê poiotês kaleitai*.

385. Aristotle distinguishes virtue proper, which requires habituation and understanding, from a mere inborn disposition in the right direction at *EN* 1144b3ff. For the 'hard and soft' corporeal virtues (and vices) see *EN* 1150a9ff.

386. cf. 229,5ff. above.

387. *Phys.* 265a22.

388. See note to Plotinus *Ennead* 3.6.19.19 in Fleet (1995) 291 for a discussion of the differing views among the ancients of the role of the mother in reproduction.

389. We seem to have three different causal explanations in play here. In one

sense the adult (i.e. the parent) as efficient cause is prior to the child; in another the child is prior in time to the adult that it will become. But 'in nature at large' the teleological explanation takes precedence, as explained in the following sentence.

390. *Ennead* 6.1.11.1.

391. The Greek word is *euarithmêtos*, which is more usually used in the passive sense of 'easy to count' or 'few in number'. At 244,27 it seems to mean 'good with numbers'.

392. *Ennead* 6.1.11.7.

393. *Ennead* 6.1.11.12-13. Plotinus' actual words (in MacKenna's translation) are: 'Another point; why is natural ability to be distinguished from that acquired by learning? Surely, if both are qualities, they cannot be differentiae of Quality.'

394. *Ennead* 6.1.11.13.

395. *Cat.* 9a16-17.

396. Adding *kata* before *ta*, as Kalbfleisch suggests.

397. Cf. 244,11.

398. *Cat.* 9a16ff.

399. As often, Simplicius does not specify the source of such comments. MS A has the singular *phêsi* ('he says'), presumably referring to Eudorus; cf. Plotinus *Ennead* 6.1.10.7-10.

400. *Cat.* 9a16 (with the addition in Aristotle's text of 'natural').

401. Simplicius is making the point that although Active and Passive are two distinct categories, by predicating the capacity for acting you may be predicating the capacity for not being acted upon, and the latter is in the same category as the capacity for being acted upon. Cf. *in Cat.* 310,8ff., 312,1ff., 319,16ff.

402. *Cat.* 9a16-18.

403. cf. Plotinus *Ennead* 6.1.12,15.

404. Kalbfleisch queries the text here, and suggests *edoxan* or *edokêsan* for *eidous ên*, which I have accepted.

405. At 242,11.

406. *Metaph.* 1019a15.

407. Since states and their privations are subsumed under the same category.

408. cf. n. 208 above.

409. From here to 249,9 Simplicius is offering a Neoplatonic interpretation, with a rare foray into the sort of figurative language used by Plotinus.

410. The soul turns (*epistrephein*) to contemplate its priors (Intellect and the forms, here described as 'what is separable') and so becomes 'actualised thought'; cf. Plotinus *Ennead* 5.1.7.42ff.

411. Nature is the fourth Hypostasis below the One, Intellect and soul; here Simplicius is introducing an Aristotelian teleological dimension.

412. cf. Plotinus *Ennead* 3.5.2ff., a Neoplatonic interpretation of the myth of the Garden in Plato's *Symposium*, where poverty is identified with matter.

413. Simplicius seems to have the Stoics and other materialist schools in mind here. I have accordingly translated *skhesis* here and at 249,34 as 'disposition', and *askhetos* at 249,29 as 'without disposition'. Cf. n. 146 above.

414. Simplicius' language here is Platonic.

415. It is somewhat surprising that Simplicius abruptly introduces 'pure accident' as a genus; perhaps his meaning is 'pure quality, i.e. pure accident', in that all qualities are accidents of Substance.

416. *Cat.* 9b19-21.

417. It is not clear whether a further distinction is being made between those who are pale or swarthy by nature (whose paleness or swarthiness is not the result

of an affection) and those whose paleness or swarthiness is not their natural complexion but has been acquired as the result of an affection (cf. 228,19, 229,1). The Greek word *hôsper* is ambiguous, introducing either an parallel or an example. If so, we end up with three types of e.g. paleness: (a) those naturally pale, (b) those pale due to a long illness, whose paleness is 'hard to change and long-lasting' (= an affective quality), and (c) those whose paleness is 'volatile and quick-changing', e.g. as a result of fear (+ an affection). The division of psychic qualities at 253,13 is only twofold.

418. *Cat.* 9b28.

419. At *Cat.* 8b27; cf. 228,21-241,34.

420. 233,10ff.

421. States and conditions are contrasted with affective qualities and affections in that the former 'result from instruction and are imposed from outside' while the latter are 'natural'. States and affective qualities are contrasted with conditions and affections in that the former are long-lived and hard to change while the latter are short-lived and superficial.

422. A further distinction is made between what has the affective quality and what has the affection; the former, however stable, does not pass the quality on to anything else (although it can affect the senses, as we learn at 254,28ff.), while the latter can, giving – as Simplicius goes on to point out – a new twist to Aristotle's terminology.

423. Simplicius introduces two further paronyms of *poios*: (a) *poiôsis* – nouns of this type generally denote a process, and (b) *poiôma* – nouns of this type generally denote an object or result of a process.

424. Accepting Kalbfleisch's addition of *pathê*.

425. *Cat.* 9a34.

426. *Cat.* 9a33.

427. *Cat.* 9b1.

428. e.g. the heat in a body causing an affection may be the result of an affection, if the body has itself been heated; otherwise, it may be the heat of a fire, which is an essential (*kat' ousian*) heat and not the result of any 'change or alteration'.

429. *Cat.* 9b9.

430. Plato *Timaeus* 67D and Aristotle *Metaph.* 1057b8.

431. Aristotle *DA* 424a7, 425b22, 427a8, 435a22; see Sorabji in Barnes, Schofield and Sorabji (eds) (1979) 49-50, and M.F. Burnyeat 'How much happens when Aristotle sees red and hears middle C? Remarks on *De Anima* II.7'. Simplicius at 255,6 denies that the eye actually takes on the colour of the perceived object.

432. As when we go indoors on a sunny day.

433. *DA* 423a2.

434. Simplicius seems to be getting into deep water here by suggesting that a child's complexion can be determined by the temporary complexion of the mother during pregnancy.

435. cf. Porphyry 132,1.

436. *Cat.* 8b35.

437. Strictly speaking, these are different genera rather than species.

438. *Cat.* 8b25-9a13.

439. Simplicius has pointed out above (255,19) that even the whiteness in snow occurs as the result of an occurrent affection, viz. the freezing of the vapour; cf. 258,5-9.

440. Virtue and knowledge (*Cat.* 8b26ff.).

441. Perhaps another reference to the Stoic 'containing' cause; see n. 54.
442. *Metaph.* 1022b15ff.
443. *Cat.* 9b33ff.
444. i.e. the whole person compounded of body and soul.
445. *DA* 403a16ff.
446. Simplicius may be referring to a passage at *Timaeus* 87D where Plato says: 'Everything good is beautiful, and the beautiful is not disproportionate; therefore the living creature that is to be beautiful must be considered to be well-proportioned.' Cf. *Philebus* 64E. Simplicius is suggesting that shape has an aesthetic content that figure lacks.
447. Iamblichus' suggestion is that it is not so much shape and figure that are sub-species of the fourth species of Quality, since these are more truly quantities amenable to qualification; rather straightness and crookedness (and their derivatives such as spiral, etc.) are qualities which are properties of qualified shape and figure.
448. In that what is true *per se* of the species may be true of the genus only *per accidens*; e.g. Socrates *qua* man is *per se* rational, but *qua* living creature only *per accidens*. Simplicius is pointing out here that since, in his opinion, figure is a species of shape, then qualities such as straightness and crookedness will belong to qualified figure (such as straight and crooked lines) *per se*, but to shape *per accidens*.
449. cf. Porphyry 132,20ff. on this passage.
450. *Cat.* 10a116.
451. *Cat.* 6b2ff.
452. cf. n. 314 above.
453. *GC* 329b18, where Aristotle argues that other properties such as rough and smooth are derived from the four elemental properties: warm, damp, cold and dry.
454. *Metaph.* 1020a33ff.
455. *Cat.* 10a27.
456. Simplicius uses two single words for 'the runner' – *ho dromikos* and *ho dromeus* (here and at 264,15); similarly for 'the boxer'. The former refers to the promising athlete, the latter to the trained athlete. See Porphyry 135,1ff. on this point.
457. The single Greek term here is *ho puktikos*.
458. Perhaps we should read a word other than *enaretos* in 264,19, since the same word is used in the next line by way of contrast to it; Porphyry (132,21) has *aretaios* and *enaretos*, both possible but rare paronyms of *aretê*.
459. See LS 47J for the Stoic doctrine of tension. The Greek words for 'tension' (*tasis*) and 'stretch' (*teinein*) are paronymous.
460. Who would argue that quality is a cause of change and alteration.
461. *Republic* 529D; cf. *Philebus* 62A.
462. e.g. the copies of the forms which pass in and out of the Receptacle at *Timaeus* 50C.
463. Otherwise we would become involved in the Third Man regress of Plato's *Parmenides*.
464. Accepting Kalbfleisch's suggestion *tois epi tôn somatôn skhêmasi* for the *tois epi tôn skhêmatôn sômasi* of the MSS.
465. On the grounds, already stated by Simplicius, that things can be put in different categories in different respects.
466. The MSS name Andronicus here, but a marginal note in one MS suggests that this should be Aristotle.

467. *Cat.* 10a11.
468. cf. 261,22 above.
469. cf. 262,16ff. above.
470. *Ennead* 6.1.11.24.
471. 267,29ff.
472. cf. Diogenes Laertius 7.142 = LS 46C.
473. Rightly added by Kalbfleisch.
474. *Cat.* 10a16; cf. *Phys.* 216b30.
475. Triangular and rectangular numbers are those which, when represented by means of dots, form triangles and rectangles respectively (although at Plato *Theaetetus* 147E the latter are defined as numbers made up of two equal factors). The Greek word *tetragônos* can mean either 'square' or 'rectangular'.
476. It has been plausibly suggested that, when Aristotle was delivering his 'category' lectures, he illustrated by means of whatever came to hand – in the case of Possessing (*ekhein*), a garment or a shoe. See Professor Sorabji's Introduction.
477. *Timaeus* 55Dff.
478. The principles of the elements for Aristotle are the four properties: warm, cold, moist and dry; *GC* 2.2-3.
479. 271,20-2 = LS 28K.
480. See Dillon (1997b) 74: 'Iamblichus plainly feels that Aristotle is not expressing himself here with sufficient clarity, and he adduces the formulation of Archytas to throw light on what Aristotle really means. Archytas declares that this species of Quality does not consist in shape (*en skhêmati*) but rather in shaping (*en skhêmatismoi*), indicating a distinction between the constitution of the shapes and the actual shapes in bodies. Even so, however, the shapes being dealt with here are not the original *logoi*, which would be analogous to the Platonic "primary bodies", but those shapes which supervene upon the shaped bodies.' Dillon notes that it is unlikely that Archytas had any such fine distinction in mind.
481. At 267,12 above.
482. Simplicius is envisaging the process of coming-to-be in colourful language; the *logos* swells outwards until the shape is completed – a bit like the inflation of a balloon – until, that is, the shape and figure are filled out according to the form. The unity of this genus of Quality underlies the unity of the process.
483. Neoplatonic terminology = the turning back of posterior to its prior (*epistrophê*). The *logos*, once the completion of the form is effected, turns back on itself and the process ends.
484. *Ennead* 6.1.12.2.
485. Kalbfleisch suspects a lacuna in the text of the MSS here, and suggests adding, after *sunthetôn, de ousiôn tôn sômatikôn*. I accept this, since it seems appropriate to include some mention of Substance here. Alternatively we could keep the text, and punctuate with a semi-colon after *sunthetôn*: 'This is true too in the case of compounds; in fact this is not inappropriate in the case of incorporeals, provided that …'.
486. *Ennead* 6.1.12.8.
487. *Metaph.* 1046a19ff.
488. See nn. 107-9 above.
489. Perhaps a reference to the common and particular qualities of the Stoics.
490. The sense seems to be that literacy is natural to the soul, it would be a specific, i.e. essential, differentia. Perhaps we should read *hêtis ei psukhês eie phusei toiautê* – 'so too is literacy; if this belonged to the soul by nature, then … it would be a specific differentia'.
491. Of the seven-stringed lyre.

492. At 175,13ff. above.

493. From 277,27 to 277,34 Simplicius shows that contrariety does not match up to either of the criteria of being a special feature; it does not apply to all of Quality (27-32), and it is not exclusive to Quality (32-4).

494. *Cat.* 10b17.

495. *Cat.* 10b18.

496. Kalbfleisch suggests that there is a lacuna in the text of the MSS at this point, and adds, after *hoti*, *-oun on tini esti*, which I accept. There is apparently a lacuna in the parallel passage in Porphyry at 137,5.

497. *Cat.* 10b19; cf. Porphyry 136,25ff. See further M. Narcy, 'Qu'est-ce une figure? Une difficulté de la doctrine aristotélicienne de la qualité' in *Concepts et catégories dans la pensée antique*, P. Aubenque (ed.), 197-216, Paris: J. Vrin, 1980.

498. Plato *Timaeus* 35A.

499. For the table of Pythagorean opposites see KRS 337-8.

500. Kalbfleisch suggests adding *en tôi posôi*; it seems sensible to add *enantiôsis* as well.

501. Accepting Kalbfleisch's addition, after *alla*, of *hupostasin ekhei, hôste en têi*.

502. Contrariety is at home with Quality because Quality is itself supervenient and changing, so that the supervenience and change of contrariety – necessary for both contraries to exist – easily comes along with qualified entities. They are of a kind.

503. For example, if the centre of the circle is seen as the contrary of a point on the circumference, then it will have an infinite number of contraries – as many as there are points on the circumference. But any one point on the circumference will have only one contrary point.

504. *Ennead* 6.3.20.1.

505. *De Sensu* 439b18ff.

506. *Ennead* 6.3.20.3.

507. Kalbfleisch rightly adds the negative.

508. To *Cat.* chapters 10 and 11.

509. *Ennead* 6.3.20.14.

510. Immediates are contraries without any range between them.

511. Simplicius is stressing change of place as appropriate to the realm of becoming but not to proper forms or *logoi*. He is ridding himself of the spatial overtones of 'distance' (*apostasis*).

512. 'Manifestation' (*emphasis*) is the technical term for the representation of a higher cause at a lower level.

513. *Timaeus* 68B.

514. *De Sensu* 442a22.

515. I suggest *ti* ('something') for the definite article *to* of the MSS.

516. *GC* 331a1ff.

517. *epidosin* (development) is Aristotle's term at *Cat.* 10b28. Simplicius here links it with *anesis* (remission) as if it = *epitasin* (intension).

518. Latitude (*platos*), the more-and-less in a quality, can be observed across a range of different items simultaneously, as the white in snow and the white in milk, or at different times in the same item, as justice in the soul of an individual.

519. cf. Porphyry 137,25ff.

520. At *Ennead* 6.3.20.39 Plotinus draws a threefold distinction: he admits that more <and less> can be found in 'things that participate'; he is less certain about qualities themselves, such as health and justice; and he excludes *platos*

altogether from the Intelligible World. Simplicius here suggests that the uncertainty expressed by Plotinus over the qualities themselves (at 205,3-5 he suggests that Plotinus failed to resolve this issue properly) did not prevent him from allowing *platos* to them, and that it was the second school mentioned here, probably yet other Platonists, who thought otherwise.

521. *Cat.* 10b30.

522. *Cat.* 10b33.

523. cf. 237,25-238,2 and n. 537 below.

524. See n. 317 above, and cf. 284,11 for a mention of 'perfected art'; 287,13-24 and 289,7 (for 'perfect literacy').

525. cf. 237,29-31; for the Stoics *diathesis* denoted a condition that did not admit more and less, while *hexis* denoted one that did.

526. Porphyry *in Cat.* 138,24ff.

527. *Cat.* 11a6.

528. This is Aristotle's phrase at *Cat.* 11a12.

529. Virtue for the Stoics consisted in maintaining the right 'tension' within the soul (cf. LS 65T). Strictly speaking a man was either completely virtuous, or not at all; there was no intermediate state between virtue and vice – hence Simplicius' query here.

530. Professor Sorabji comments: 'Nature, habit and teaching are the three sources of virtuous character in Aristotle *EN* 10.9. Simplicius is like the Middle Platonist Apuleius *On the Doctrines of Plato* in suggesting that imperfect virtues are those produced by only one of these three. The Peripatetic Aspasius, like Simplicius, raises and rejects the idea that imperfect virtues may admit degrees at *in EN* 99,29-100,4. But Aspasius suggests that imperfect virtues may be those in which one does not get right all aspects of one's actions (e.g. the quantity of one's gift is wrong). Simplicius' reason for rejecting the suggestion that imperfect virtues may admit of degrees is that he is currently following the alternative view, that it is not the virtue, but the possession of virtue, that admits of degrees.'

531. Simplicius' Greek is obscure, but he is pointing to the contrast made by Aristotle at *Cat.* 10b29ff. between certain qualities such as justice and health, which cannot themselves admit of degrees and are thereby 'perfect', and what participates in them, which can.

532. There is an apparently redundant *te* ('both') in 287,32.

533. The intermediate arts.

534. i.e. the items of knowledge themselves, not their acquisition.

535. Reading the feminine *tas teleias* (to agree with 'virtues') rather than the masculine *tous teleious* of the MSS. The confusion seems to have occurred because the word 'immaterial' (*aulous*) has no separate feminine form, and so the scribe, assuming it to agree with the masculine *heautous* (themselves) has put the following phrase in the masculine too.

536. Or 'the discussion of Quality [in the *Cat.*]'.

537. The more and less is better explained in terms of the weakening of the form as it enters matter than in terms of the nature of matter itself.

538. cf. 286,5ff. above.

539. *Ennead* 6.3.20.39.

540. The fourth doctrine given at 285,1ff.

541. Porphyry 138,20.

542. e.g. 279,34; 288,35.

543. Simplicius is using 'agreement' (*koinônia*) as a very general term to be able to identify identity (in Substance), equality (in Quantity) and likeness (in Quality) as its species.

544. Plato *Parmenides* 139E; 140A.
545. cf. Porphyry 139,26.
546. *Cat.* 11a37.
547. This does not apply to the condition itself but constitutes one of its intrinsic characteristics which is responsible for its being ranked as a quality.
548. Reading *tou* for *tês* at 293,28.
549. According to the three different views of the scope of *Cat.*: things, concepts and words.

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Appendix
The Commentators*

The 15,000 pages of the Ancient Greek Commentaries on Aristotle are the largest corpus of Ancient Greek philosophy that has not been translated into English or other European languages. The standard edition (*Commentaria in Aristotelem Graeca*, or *CAG*) was produced by Hermann Diels as general editor under the auspices of the Prussian Academy in Berlin. Arrangements have been made to translate at least a large proportion of this corpus, along with some other Greek and Latin commentaries not included in the Berlin edition, and some closely related non-commentary works by the commentators.

The works are not just commentaries on Aristotle, although they are invaluable in that capacity too. One of the ways of doing philosophy between A.D. 200 and 600, when the most important items were produced, was by writing commentaries. The works therefore represent the thought of the Peripatetic and Neoplatonist schools, as well as expounding Aristotle. Furthermore, they embed fragments from all periods of Ancient Greek philosophical thought: this is how many of the Presocratic fragments were assembled, for example. Thus they provide a panorama of every period of Ancient Greek philosophy.

The philosophy of the period from A.D. 200 to 600 has not yet been intensively explored by philosophers in English-speaking countries, yet it is full of interest for physics, metaphysics, logic, psychology, ethics and religion. The contrast with the study of the Presocratics is striking. Initially the incomplete Presocratic fragments might well have seemed less promising, but their interest is now widely known, thanks to the philological and philosophical effort that has been concentrated upon them. The incomparably vaster corpus which preserved so many of those fragments offers at least as much interest, but is still relatively little known.

The commentaries represent a missing link in the history of philosophy: the Latin-speaking Middle Ages obtained their knowledge of Aristotle at least partly through the medium of the commentaries. Without an appreciation of this, mediaeval interpretations of Aristotle will not be understood. Again, the ancient commentaries are the unsuspected source of ideas which have been thought, wrongly, to originate in the later mediaeval period. It has been supposed, for example, that Bonaventure in the thirteenth century invented the ingenious arguments based on the concept of infinity which attempt to prove the Christian view that the universe had a beginning. In fact, Bonaventure is merely repeating arguments devised

* Reprinted from the Editor's General Introduction to the series in Christian Wildberg, *Philoponus Against Aristotle on the Eternity of the World*, London and Ithaca, N.Y., 1987.

by the commentator Philoponus 700 years earlier and preserved in the meantime by the Arabs. Bonaventure even uses Philoponus' original examples. Again, the introduction of impetus theory into dynamics, which has been called a scientific revolution, has been held to be an independent invention of the Latin West, even if it was earlier discovered by the Arabs or their predecessors. But recent work has traced a plausible route by which it could have passed from Philoponus, via the Arabs, to the West.

The new availability of the commentaries in the sixteenth century, thanks to printing and to fresh Latin translations, helped to fuel the Renaissance break from Aristotelian science. For the commentators record not only Aristotle's theories, but also rival ones, while Philoponus as a Christian devises rival theories of his own and accordingly is mentioned in Galileo's early works more frequently than Plato.[1]

It is not only for their philosophy that the works are of interest. Historians will find information about the history of schools, their methods of teaching and writing and the practices of an oral tradition.[2] Linguists will find the indexes and translations an aid for studying the development of word meanings, almost wholly uncharted in Liddell and Scott's *Lexicon*, and for checking shifts in grammatical usage.

Given the wide range of interests to which the volumes will appeal, the aim is to produce readable translations, and to avoid so far as possible presupposing any knowledge of Greek. Notes will explain points of meaning, give cross-references to other works, and suggest alternative interpretations of the text where the translator does not have a clear preference. The introduction to each volume will include an explanation why the work was chosen for translation: none will be chosen simply because it is there. Two of the Greek texts are currently being re-edited – those of Simplicius *in Physica* and *in de Caelo* – and new readings will be exploited by

1. See Fritz Zimmermann, 'Philoponus' impetus theory in the Arabic tradition'; Charles Schmitt, 'Philoponus' commentary on Aristotle's *Physics* in the sixteenth century', and Richard Sorabji, 'John Philoponus', in Richard Sorabji (ed.), *Philoponus and the Rejection of Aristotelian Science* (London and Ithaca, N.Y. 1987).

2. See e.g. Karl Praechter, 'Die griechischen Aristoteleskommentare', *Byzantinische Zeitschrift* 18 (1909), 516-38 (translated into English in R. Sorabji (ed.), *Aristotle Transformed: the ancient commentators and their influence* (London and Ithaca, N.Y. 1990); M. Plezia, *de Commentariis Isagogicis* (Cracow 1947); M. Richard, '*Apo Phônês', Byzantion* 20 (1950), 191-222; É. Evrard, *L'Ecole d'Olympiodore et la composition du commentaire à la physique de Jean Philopon*, Diss. (Liège 1957); L.G. Westerink, *Anonymous Prolegomena to Platonic Philosophy* (Amsterdam 1962) (new revised edition, translated into French, Collection Budé; part of the revised introduction, in English, is included in *Aristotle Transformed*); A.-J. Festugière, 'Modes de composition des commentaires de Proclus', *Museum Helveticum* 20 (1963), 77-100, repr. in his *Études* (1971), 551-74; P. Hadot, 'Les divisions des parties de la philosophie dans l'antiquité', *Museum Helveticum* 36 (1979), 201-23; I. Hadot, 'La division néoplatonicienne des écrits d'Aristote', in J. Wiesner (ed.), *Aristoteles Werk und Wirkung* (Paul Moraux gewidmet), vol. 2 (Berlin 1986); I. Hadot, 'Les introductions aux commentaires exégétiques chez les auteurs néoplatoniciens et les auteurs chrétiens', in M. Tardieu (ed.), *Les règles de l'interprétation* (Paris 1987), 99-119. These topics are treated, and a bibliography supplied, in *Aristotle Transformed*.

translators as they become available. Each volume will also contain a list of proposed emendations to the standard text. Indexes will be of more uniform extent as between volumes than is the case with the Berlin edition, and there will be at least three of them: an English-Greek glossary, a Greek-English index, and a subject index.

The commentaries fall into three main groups. The first group is by authors in the Aristotelian tradition up to the fourth century A.D. This includes the earliest extant commentary, that by Aspasius in the first half of the second century A.D. on the *Nicomachean Ethics*. The anonymous commentary on Books 2, 3, 4 and 5 of the *Nicomachean Ethics*, in *CAG* vol. 20, is derived from Adrastus, a generation later.[3] The commentaries by Alexander of Aphrodisias (appointed to his chair between A.D. 198 and 209) represent the fullest flowering of the Aristotelian tradition. To his successors Alexander was The Commentator *par excellence*. To give but one example (not from a commentary) of his skill at defending and elaborating Aristotle's views, one might refer to his defence of Aristotle's claim that space is finite against the objection that an edge of space is conceptually problematic.[4] Themistius (*fl.* late 340s to 384 or 385) saw himself as the inventor of paraphrase, wrongly thinking that the job of commentary was completed.[5] In fact, the Neoplatonists were to introduce new dimensions into commentary. Themistius' own relation to the Neoplatonist as opposed to the Aristotelian tradition is a matter of controversy,[6] but it would be agreed that his commentaries show far less bias than the full-blown Neoplatonist ones. They are also far more informative than the designation 'paraphrase' might suggest, and it has been estimated that Philoponus' *Physics* commentary draws silently on Themistius six hundred times.[7] The pseudo-Alexandrian commentary on *Metaphysics* 6-14, of unknown

3. Anthony Kenny, *The Aristotelian Ethics* (Oxford 1978), 37, n.3: Paul Moraux, *Der Aristotelismus bei den Griechen*, vol. 2 (Berlin 1984), 323-30.

4. Alexander, *Quaestiones* 3.12, discussed in my *Matter, Space and Motion* (London and Ithaca, N.Y. 1988). For Alexander see R.W. Sharples, 'Alexander of Aphrodisias: scholasticism and innovation', in W. Haase (ed.), *Aufstieg und Niedergang der römischen Welt*, part 2 *Principat*, vol. 36.2, *Philosophie und Wissenschaften* (1987).

5. Themistius *in An. Post.* 1,2-12. See H.J. Blumenthal, 'Photius on Themistius (Cod. 74): did Themistius write commentaries on Aristotle?', *Hermes* 107 (1979), 168-82.

6. For different views, see H.J. Blumenthal, 'Themistius, the last Peripatetic commentator on Aristotle?', in Glen W. Bowersock, Walter Burkert, Michael C.J. Putnam, *Arktouros*, Hellenic Studies Presented to Bernard M.W. Knox (Berlin and N.Y., 1979), 391-400; E.P. Mahoney, 'Themistius and the agent intellect in James of Viterbo and other thirteenth-century philosophers: (Saint Thomas Aquinas, Siger of Brabant and Henry Bate)', *Augustiniana* 23 (1973), 422-67, at 428-31; id., 'Neoplatonism, the Greek commentators and Renaissance Aristotelianism', in D.J. O'Meara (ed.), *Neoplatonism and Christian Thought* (Albany N.Y. 1982), 169-77 and 264-82, esp. n. 1, 264-6; Robert Todd, introduction to translation of Themistius *in DA* 3.4-8, in *Two Greek Aristotelian Commentators on the Intellect*, trans. Frederick M. Schroeder and Robert B. Todd (Toronto 1990).

7. H. Vitelli, *CAG* 17, p. 992, s.v. Themistius.

authorship, has been placed by some in the same group of commentaries as being earlier than the fifth century.[8]

By far the largest group of extant commentaries is that of the Neoplatonists up to the sixth century A.D. Nearly all the major Neoplatonists, apart from Plotinus (the founder of Neoplatonism), wrote commentaries on Aristotle, although those of Iamblichus (*c.* 250–*c.* 325) survive only in fragments, and those of three Athenians, Plutarchus (died 432), his pupil Proclus (410–485) and the Athenian Damascius (*c.* 462–after 538), are lost.[9] As a result of these losses, most of the extant Neoplatonist commentaries come from the late fifth and the sixth centuries and a good proportion from Alexandria. There are commentaries by Plotinus' disciple and editor Porphyry (232–309), by Iamblichus' pupil Dexippus (*c.* 330), by Proclus' teacher Syrianus (died *c.* 437), by Proclus' pupil Ammonius (435/445–517/526), by Ammonius' three pupils Philoponus (*c.* 490 to 570s), Simplicius (wrote after 532, probably after 538) and Asclepius (sixth century), by Ammonius' next but one successor Olympiodorus (495/505–after 565), by Elias (*fl.* 541?), by David (second half of the sixth century, or beginning of the seventh) and by Stephanus (took the chair in Constantinople *c.* 610). Further, a commentary on the *Nicomachean Ethics* has been ascribed to Heliodorus of Prusa, an unknown pre-fourteenth-century figure, and there is a commentary by Simplicius' colleague Priscian of Lydia on Aristotle's successor Theophrastus. Of these commentators some of the last were Christians (Philoponus, Elias, David and Stephanus), but they were Christians writing in the Neoplatonist tradition, as was also Boethius who produced a number of commentaries in Latin before his death in 525 or 526.

The third group comes from a much later period in Byzantium. The Berlin edition includes only three out of more than a dozen commentators described in Hunger's *Byzantinisches Handbuch*.[10] The two most important are Eustratius (1050/1060–*c.*1120), and Michael of Ephesus. It has been suggested that these two belong to a circle organised by the princess

8. The similarities to Syrianus (died *c.* 437) have suggested to some that it predates Syrianus (most recently Leonardo Tarán, review of Paul Moraux, *Der Aristotelismus*, vol.1 in *Gnomon* 46 (1981), 721-50 at 750), to others that it draws on him (most recently P. Thillet, in the Budé edition of Alexander *de Fato*, p. lvii). Praechter ascribed it to Michael of Ephesus (eleventh or twelfth century), in his review of *CAG* 22.2, in *Göttingische Gelehrte Anzeiger* 168 (1906), 861-907.

9. The Iamblichus fragments are collected in Greek by Bent Dalsgaard Larsen, *Jamblique de Chalcis, Exégète et Philosophe* (Aarhus 1972), vol. 2. Most are taken from Simplicius, and will accordingly be translated in due course. The evidence on Damascius' commentaries is given in L.G. Westerink, *The Greek Commentaries on Plato's Phaedo*, vol. 2, Damascius (Amsterdam 1977), 11-12; on Proclus' in L.G. Westerink, *Anonymous Prolegomena to Platonic Philosophy* (Amsterdam 1962), xii, n. 22; on Plutarchus' in H.M. Blumenthal, 'Neoplatonic elements in the de Anima commentaries', *Phronesis* 21 (1976), 75.

10. Herbert Hunger, *Die hochsprachliche profane Literatur der Byzantiner*, vol. 1 (= *Byzantinisches Handbuch*, part 5, vol. 1) (Munich 1978), 25-41. See also B.N. Tatakis, *La Philosophie Byzantine* (Paris 1949).

Anna Comnena in the twelfth century, and accordingly the completion of Michael's commentaries has been redated from 1040 to 1138.[11] His commentaries include areas where gaps had been left. Not all of these gap-fillers are extant, but we have commentaries on the neglected biological works, on the *Sophistici Elenchi*, and a small fragment of one on the *Politics*. The lost *Rhetoric* commentary had a few antecedents, but the *Rhetoric* too had been comparatively neglected. Another product of this period may have been the composite commentary on the *Nicomachean Ethics* (*CAG* 20) by various hands, including Eustratius and Michael, along with some earlier commentators, and an improvisation for Book 7. Whereas Michael follows Alexander and the conventional Aristotelian tradition, Eustratius' commentary introduces Platonist, Christian and anti-Islamic elements.[12]

The composite commentary was to be translated into Latin in the next century by Robert Grosseteste in England. But Latin translations of various logical commentaries were made from the Greek still earlier by James of Venice (*fl. c.* 1130), a contemporary of Michael of Ephesus, who may have known him in Constantinople. And later in that century other commentaries and works by commentators were being translated from Arabic versions by Gerard of Cremona (died 1187).[13] So the twelfth century resumed the transmission which had been interrupted at Boethius' death in the sixth century.

The Neoplatonist commentaries of the main group were initiated by Porphyry. His master Plotinus had discussed Aristotle, but in a very independent way, devoting three whole treatises (*Enneads* 6.1-3) to attacking Aristotle's classification of the things in the universe into categories. These categories took no account of Plato's world of Ideas, were inferior to Plato's classifications in the *Sophist* and could anyhow be collapsed, some

11. R. Browning, 'An unpublished funeral oration on Anna Comnena', *Proceedings of the Cambridge Philological Society* n.s. 8 (1962), 1-12, esp. 6-7.

12. R. Browning, op. cit. H.D.P. Mercken, *The Greek Commentaries of the Nicomachean Ethics of Aristotle in the Latin Translation of Grosseteste, Corpus Latinum Commentariorum in Aristotelem Graecorum* VI 1 (Leiden 1973), ch. 1, 'The compilation of Greek commentaries on Aristotle's Nicomachean Ethics'. Sten Ebbesen, 'Anonymi Aurelianensis I Commentarium in *Sophisticos Elenchos*', *Cahiers de l'Institut Moyen Age Grecque et Latin* 34 (1979), 'Boethius, Jacobus Veneticus, Michael Ephesius and "Alexander" ', pp. v-xiii; id., *Commentators and Commentaries on Aristotle's Sophistici Elenchi*, 3 parts, *Corpus Latinum Commentariorum in Aristotelem Graecorum*, vol. 7 (Leiden 1981); A. Preus, *Aristotle and Michael of Ephesus on the Movement and Progression of Animals* (Hildesheim 1981), introduction.

13. For Grosseteste, see Mercken as in n. 12. For James of Venice, see Ebbesen as in n. 12, and L. Minio-Paluello, 'Jacobus Veneticus Grecus', *Traditio* 8 (1952), 265-304; id., 'Giacomo Veneto e l'Aristotelismo Latino', in Pertusi (ed.), *Venezia e l'Oriente fra tardo Medioevo e Rinascimento* (Florence 1966), 53-74, both reprinted in his *Opuscula* (1972). For Gerard of Cremona, see M. Steinschneider, *Die europäischen Übersetzungen aus dem arabischen bis Mitte des 17. Jahrhunderts* (repr. Graz 1956); E. Gilson, *History of Christian Philosophy in the Middle Ages* (London 1955), 235-6 and more generally 181-246. For the translators in general, see Bernard G. Dod, 'Aristoteles Latinus', in N. Kretzmann, A. Kenny, J. Pinborg (eds), *The Cambridge History of Latin Medieval Philosophy* (Cambridge 1982).

of them into others. Porphyry replied that Aristotle's categories could apply perfectly well to the world of intelligibles and he took them as in general defensible.[14] He wrote two commentaries on the *Categories*, one lost, and an introduction to it, the *Isagôgê*, as well as commentaries, now lost, on a number of other Aristotelian works. This proved decisive in making Aristotle a necessary subject for Neoplatonist lectures and commentary. Proclus, who was an exceptionally quick student, is said to have taken two years over his Aristotle studies, which were called the Lesser Mysteries, and which preceded the Greater Mysteries of Plato.[15] By the time of Ammonius, the commentaries reflect a teaching curriculum which begins with Porphyry's *Isagôgê* and Aristotle's *Categories*, and is explicitly said to have as its final goal a (mystical) ascent to the supreme Neoplatonist deity, the One.[16] The curriculum would have progressed from Aristotle to Plato, and would have culminated in Plato's *Timaeus* and *Parmenides*. The latter was read as being about the One, and both works were established in this place in the curriculum at least by the time of Iamblichus, if not earlier.[17]

Before Porphyry, it had been undecided how far a Platonist should accept Aristotle's scheme of categories. But now the proposition began to gain force that there was a harmony between Plato and Aristotle on most things.[18] Not for the only time in the history of philosophy, a perfectly crazy proposition proved philosophically fruitful. The views of Plato and of Aristotle had both to be transmuted into a new Neoplatonist philosophy in order to exhibit the supposed harmony. Iamblichus denied that Aristotle contradicted Plato on the theory of Ideas.[19] This was too much for Syrianus and his pupil Proclus. While accepting harmony in many areas,[20] they could see that there was disagreement on this issue and also on the issue of whether God was causally responsible for the existence of the ordered

14. See P. Hadot, 'L'harmonie des philosophies de Plotin et d'Aristote selon Porphyre dans le commentaire de Dexippe sur les Catégories', in *Plotino e il neoplatonismo in Oriente e in Occidente* (Rome 1974), 31-47; A.C. Lloyd, 'Neoplatonic logic and Aristotelian logic', *Phronesis* 1 (1955-6), 58-79 and 146-60.

15. Marinus, *Life of Proclus* ch. 13, 157,41 (Boissonade).

16. The introductions to the *Isagôgê* by Ammonius, Elias and David, and to the *Categories* by Ammonius, Simplicius, Philoponus, Olympiodorus and Elias are discussed by L.G. Westerink, *Anonymous Prolegomena* and I. Hadot, 'Les Introductions', see n. 2 above.

17. Proclus in *Alcibiadem 1* p. 11 (Creuzer); Westerink, *Anonymous Prolegomena*, ch. 26, 12f. For the Neoplatonist curriculum see Westerink, Festugière, P. Hadot and I. Hadot in n. 2.

18. See e.g. P. Hadot (1974), as in n. 14 above; H.J. Blumenthal, 'Neoplatonic elements in the de Anima commentaries', *Phronesis* 21 (1976), 64-87; H.A. Davidson, 'The principle that a finite body can contain only finite power', in S. Stein and R. Loewe (eds), *Studies in Jewish Religious and Intellectual History presented to A. Altmann* (Alabama 1979), 75-92; Carlos Steel, 'Proclus et Aristotle', Proceedings of the Congrès Proclus held in Paris 1985, J. Pépin and H.D. Saffrey (eds), *Proclus, lecteur et interprète des anciens* (Paris 1987), 213-25; Koenraad Verrycken, *God en Wereld in de Wijsbegeerte van Ioannes Philoponus*, Ph.D. Diss. (Louvain 1985).

19. Iamblichus ap. Elian *in Cat.* 123,1-3.

20. Syrianus *in Metaph.* 80,4-7; Proclus *in Tim.* 1.6,21-7,16.

physical cosmos, which Aristotle denied. But even on these issues, Proclus' pupil Ammonius was to claim harmony, and, though the debate was not clear cut,[21] his claim was on the whole to prevail. Aristotle, he maintained, accepted Plato's Ideas,[22] at least in the form of principles (*logoi*) in the divine intellect, and these principles were in turn causally responsible for the beginningless existence of the physical universe. Ammonius wrote a whole book to show that Aristotle's God was thus an efficent cause, and though the book is lost, some of its principal arguments are preserved by Simplicius.[23] This tradition helped to make it possible for Aquinas to claim Aristotle's God as a Creator, albeit not in the sense of giving the universe a beginning, but in the sense of being causally responsible for its beginningless existence.[24] Thus what started as a desire to harmonise Aristotle with Plato finished by making Aristotle safe for Christianity. In Simplicius, who goes further than anyone,[25] it is a formally stated duty of the commentator to display the harmony of Plato and Aristotle in most things.[26] Philoponus, who with his independent mind had thought better of his earlier belief in harmony, is castigated by Simplicius for neglecting this duty.[27]

The idea of harmony was extended beyond Plato and Aristotle to Plato and the Presocratics. Plato's pupils Speusippus and Xenocrates saw Plato as being in the Pythagorean tradition.[28] From the third to first centuries B.C., pseudo-Pythagorean writings present Platonic and Aristotelian doctrines as if they were the ideas of Pythagoras and his pupils,[29] and these forgeries were later taken by the Neoplatonists as genuine. Plotinus saw the Presocratics as precursors of his own views,[30] but Iamblichus went far beyond him by writing ten volumes on Pythagorean philosophy.[31] Thereafter Proclus sought to unify the whole of Greek

21. Asclepius sometimes accepts Syranius' interpretation (*in Metaph.* 433,9-436,6); which is, however, qualified, since Syrianus thinks Aristotle is realy committed willy-nilly to much of Plato's view (*in Metaph.* 117,25-118,11; ap. Asclepium *in Metaph.* 433,16; 450,22); Philoponus repents of his early claim that Plato is not the target of Aristotle's attack, and accepts that Plato is rightly attacked for treating ideas as independent entities outside the divine Intellect (*in DA* 37,18-31; *in Phys.* 225,4-226,11; *contra Procl.* 26,24-32,13; *in An. Post.* 242,14-243,25).

22. Asclepius *in Metaph.* from the voice of (i.e. from the lectures of) Ammonius 69,17-21; 71,28; cf. Zacharias *Ammonius, Patrologia Graeca* vol. 85 col. 952 (Colonna).

23. Simplicius *in Phys.* 1361,11-1363,12. See H.A. Davidson; Carlos Steel; Koenraad Verrycken in n. 18 above.

24. See Richard Sorabji, *Matter, Space and Motion* (London and Ithaca, N.Y. 1988), ch. 15.

25. See e.g. H.J. Blumenthal in n. 18 above.

26. Simplicius *in Cat.* 7,23-32.

27. Simplicius *in Cael.* 84,11-14; 159,2-9. On Philoponus' *volte face* see n. 21 above.

28. See e.g. Walter Burkert, *Weisheit und Wissenschaft* (Nürnberg 1962), translated as *Lore and Science in Ancient Pythagoreanism* (Cambridge Mass. 1972), 83-96.

29. See Holger Thesleff, *An Introduction to the Pythagorean Writings of the Hellenistic Period* (Åbo 1961); Thomas Alexander Szlezák, *Pseudo-Archytas über die Kategorien*, Peripatoi vol. 4 (Berlin and New York 1972).

30. Plotinus e.g. 4.8.1; 5.1.8 (10-27); 5.1.9.

31. See Dominic O'Meara, *Pythagoras Revived: Mathematics and Philosophy in Late Antiquity* (Oxford 1989).

philosophy by presenting it as a continuous clarification of divine revelation[32] and Simplicius argued for the same general unity in order to rebut Christian charges of contradictions in pagan philosophy.[33]

Later Neoplatonist commentaries tend to reflect their origin in a teaching curriculum:[34] from the time of Philoponus, the discussion is often divided up into lectures, which are subdivided into studies of doctrine and of text. A general account of Aristotle's philosophy is prefixed to the *Categories* commentaries and divided, according to a formula of Proclus,[35] into ten questions. It is here that commentators explain the eventual purpose of studying Aristotle (ascent to the One) and state (if they do) the requirement of displaying the harmony of Plato and Aristotle. After the ten-point introduction to Aristotle, the *Categories* is given a six-point introduction, whose antecedents go back earlier than Neoplatonism, and which requires the commentator to find a unitary theme or scope (*skopos*) for the treatise. The arrangements for late commentaries on Plato are similar. Since the Plato commentaries form part of a single curriculum they should be studied alongside those on Aristotle. Here the situation is easier, not only because the extant corpus is very much smaller, but also because it has been comparatively well served by French and English translators.[36]

Given the theological motive of the curriculum and the pressure to harmonise Plato with Aristotle, it can be seen how these commentaries are a major source for Neoplatonist ideas. This in turn means that it is not safe to extract from them the fragments of the Presocratics, or of other authors, without making allowance for the Neoplatonist background against which the fragments were originally selected for discussion. For different reasons, analogous warnings apply to fragments preserved by the pre-Neoplatonist commentator Alexander.[37] It will be another advantage of the present translations that they will make it easier to check the distorting effect of a commentator's background.

Although the Neoplatonist commentators conflate the views of Aristotle

32. See Christian Guérard, 'Parménide d'Elée selon les Néoplatoniciens', in P. Aubenque (ed.), *Etudes sur Parménide*, vol. 2 (Paris 1987).

33. Simplicius *in Phys.* 28,32-29,5; 640,12-18. Such thinkers as Epicurus and the Sceptics, however, were not subject to harmonisation.

34. See the literature in n. 2 above.

35. ap. Elian *in Cat.* 107,24-6.

36. English: Calcidius *in Tim.* (parts by van Winden; den Boeft); Iamblichus fragments (Dillon); Proclus *in Tim.* (Thomas Taylor); Proclus *in Parm.* (Dillon); Proclus *in Parm.*, end of 7th book, from the Latin (Klibansky, Labowsky, Anscombe); Proclus *in Alcib. 1* (O'Neill); Olympiodorus and Damascius *in Phaedonem* (Westerink); Damascius *in Philebum* (Westerink); *Anonymous Prolegomena to Platonic Philosophy* (Westerink). See also extracts in Thomas Taylor, *The Works of Plato*, 5 vols. (1804). French: Proclus *in Tim.* and *in Rempublicam* (Festugière); *in Parm.* (Chaignet); Anon. *in Parm* (P. Hadot); Damascius *in Parm.* (Chaignet).

37. For Alexander's treatment of the Stoics, see Robert B. Todd, *Alexander of Aphrodisias on Stoic Physics* (Leiden 1976), 24-9.

with those of Neoplatonism, Philoponus alludes to a certain convention when he quotes Plutarchus expressing disapproval of Alexander for expounding his own philosophical doctrines in a commentary on Aristotle.[38] But this does not stop Philoponus from later inserting into his own commentaries on the *Physics* and *Meteorology* his arguments in favour of the Christian view of Creation. Of course, the commentators also wrote independent works of their own, in which their views are expressed independently of the exegesis of Aristotle. Some of these independent works will be included in the present series of translations.

The distorting Neoplatonist context does not prevent the commentaries from being incomparable guides to Aristotle. The introductions to Aristotle's philosophy insist that commentators must have a minutely detailed knowledge of the entire Aristotelian corpus, and this they certainly have. Commentators are also enjoined neither to accept nor reject what Aristotle says too readily, but to consider it in depth and without partiality. The commentaries draw one's attention to hundreds of phrases, sentences and ideas in Aristotle, which one could easily have passed over, however often one read him. The scholar who makes the right allowance for the distorting context will learn far more about Aristotle than he would be likely to on his own.

The relations of Neoplatonist commentators to the Christians were subtle. Porphyry wrote a treatise explicitly against the Christians in 15 books, but an order to burn it was issued in 448, and later Neoplatonists were more circumspect. Among the last commentators in the main group, we have noted several Christians. Of these the most important were Boethius and Philoponus. It was Boethius' programme to transmit Greek learning to Latin-speakers. By the time of his premature death by execution, he had provided Latin translations of Aristotle's logical works, together with commentaries in Latin but in the Neoplatonist style on Porphyry's *Isagôgê* and on Aristotle's *Categories* and *de Interpretatione*, and interpretations of the *Prior* and *Posterior Analytics*, *Topics* and *Sophistici Elenchi*. The interruption of his work meant that knowledge of Aristotle among Latin-speakers was confined for many centuries to the logical works. Philoponus is important both for his proofs of the Creation and for his progressive replacement of Aristotelian science with rival theories, which were taken up at first by the Arabs and came fully into their own in the West only in the sixteenth century.

Recent work has rejected the idea that in Alexandria the Neoplatonists compromised with Christian monotheism by collapsing the distinction between their two highest deities, the One and the Intellect. Simplicius (who left Alexandria for Athens) and the Alexandrians Ammonius and

38. Philoponus *in DA* 21,20-3.

Asclepius appear to have acknowledged their beliefs quite openly, as later did the Alexandrian Olympiodorus, despite the presence of Christian students in their classes.[39]

The teaching of Simplicius in Athens and that of the whole pagan Neoplatonist school there was stopped by the Christian Emperor Justinian in 529. This was the very year in which the Christian Philoponus in Alexandria issued his proofs of Creation against the earlier Athenian Neoplatonist Proclus. Archaeological evidence has been offered that, after their temporary stay in Ctesiphon (in present-day Iraq), the Athenian Neoplatonists did not return to their house in Athens, and further evidence has been offered that Simplicius went to Harrān (Carrhae), in present-day Turkey near the Iraq border.[40] Wherever he went, his commentaries are a treasurehouse of information about the preceding thousand years of Greek philosophy, information which he painstakingly recorded after the closure in Athens, and which would otherwise have been lost. He had every reason to feel bitter about Christianity, and in fact he sees it and Philoponus, its representative, as irreverent. They deny the divinity of the heavens and prefer the physical relics of dead martyrs.[41] His own commentaries by contrast culminate in devout prayers.

Two collections of articles by various hands have been published, to make the work of the commentators better known. The first is devoted to Philoponus;[42] the second is about the commentators in general, and goes into greater detail on some of the issues briefly mentioned here.[43]

39. For Simplicius, see I. Hadot, *Le Problème du Néoplatonisme Alexandrin: Hiéroclès et Simplicius* (Paris 1978); for Ammonius and Asclepius, Koenraad Verrycken, *God en wereld in de Wijsbegeerte van Ioannes Philoponus*, Ph.D. Diss. (Louvain 1985); for Olympiodorus, L.G. Westerink, *Anonymous Prolegomena to Platonic Philosophy* (Amsterdam 1962).

40. Alison Frantz, 'Pagan philosophers in Christian Athens', *Proceedings of the American Philosophical Society* 119 (1975), 29-38; M. Tardieu, 'Témoins orientaux du *Premier Alcibiade* à Harrān et à Nag 'Hammādi', *Journal Asiatique* 274 (1986); id., 'Les calendriers en usage à Harrān d'après les sources arabes et le commentaire de Simplicius à la *Physique* d'Aristote', in I. Hadot (ed.), *Simplicius, sa vie, son oeuvre, sa survie* (Berlin 1987), 40-57; id., *Coutumes nautiques mésopotamiennes chez Simplicius*, in preparation. The opposing view that Simplicius returned to Athens is most fully argued by Alan Cameron, 'The last day of the Academy at Athens', *Proceedings of the Cambridge Philological Society* 195, n.s. 15 (1969), 7-29. P. Foulkes, 'Where was Simplicius', *JHS* 112 (1992), 143. R. Thiel, 'Simplikios und das Ende der neuplatonischen Schule in Athen', Akademie der Wissenschaften und der Literatur Mainz: *Abhandlungen der geistes- und sozialwissenschaftlichen Klasse*, no. 8, 1999.

41. Simplicius *in Cael.* 26,4-7; 70,16-18; 90,1-18; 370,29-371,4. See on his whole attitude Philippe Hoffmann, 'Simplicius' polemics', in Richard Sorabji (ed.), *Philoponus and the Rejection of Aristotelian Science* (London and Ithaca, N.Y. 1987).

42. Richard Sorabji (ed.), *Philoponus and the Rejection of Aristotelian Science* (London and Ithaca, N.Y. 1987).

43. Richard Sorabji (ed.), *Aristotle Transformed: the ancient commentators and their influence* (London and Ithaca, N.Y. 1990). The lists of texts and previous translations of the commentaries included in Wildberg, *Philoponus Against Aristotle on the Eternity of the World* (pp. 12ff.) are not included here. The list of translations should be augmented by: F.L.S. Bridgman, Heliodorus (?) in *Ethica Nicomachea*, London 1807.

I am grateful for comments to Henry Blumenthal, Victor Caston, I. Hadot, Paul Mercken, Alain Segonds, Robert Sharples, Robert Todd, L.G. Westerink and Christian Wildberg.

English-Greek Glossary

absence: *apousia*
absolute: *apolutos*
accept: *paralambanein*
accident: *sumbasis*; be accidental: *sumbainein*
account: *logos*
accurate: *akribês*
acquired: *epiktêtos*
acquisition: *analêpsis*
act on: *energein*; action: *poiêsis*; active: *drastikos*, *energêtikos*, *poiêtikos*; activity: *energêma*, *poiein*; be acted on: *paskhein*
actualisation: *energeia*
addition: *prothêkê*
admit: *paradekhesthai*; not admitting: *anepidektôs, arnêtikos*
adventitious: *episkeuastos*
advocate: *sunêgorein*
affection: *pathêma*, *pathos*, *peisis*
affinity: *oikeiotês*
affirmation: *kataphasis*
agree: *sumphônein*, *sunkhôrein*
aim for: *stokhazein*
allocate: *katanemein*
alter: *summetaballein*; alteration: *alloiôsis*, *heteroiôsis*, *tropê*; be altered: *alloiousthai*
ambiguity: *parakousma*
amendment: *katorthôsis*
analogy: *analogia*
animal: *zôon*
apart: *khôris*
appear: *kataphainesthai*
appellation: *prosêgoria*
appetitive: *epithumêtikos*
apply to: *harmottein*, *parakolouthein*
apprehend: *antilambanein*; apprehensive: *antilêptikos*
approach: *epibolê*, *parodos*
appropriate: *oikeios*, *prosêkôn*
aptitude: *epitêdeiotês*
arrange under: *hupotattein*; arrangement: *diataxis*, *katataxis*
arrive: *paragignesthai*
art: *tekhnê*; lack of skill: *atekhnia*
articulate-speaking: *merops*; articulation: *diarthrôsis*
ask: *zêtein*; asking: *zêtêsis*
assert: *apophainesthai*
assimilable: *aphomoiôtikos*; assimilate: *aphomoioun*
assume: *hupolambanein*
attach: *sunartan*
attenuated: *eklelumenos*
authoritative: *kurios*
axiom: *axiôma*

be: *einai*; give existence to: *huphistanai*; invest with being: *ousioun*
bear witness: *marturein*
being on one's guard: *probolê*
belief: *huponoia*
binding together: *sundetikos*
blend: *krama*; be mixed: *summignusthai*
body: *sôma*; corporeal: *sômatikos*; corporeality: *sômatotês*; of a bodily form: *sômatoeidês*; bodiless: *asômatos*
boundary: *peras*; limited: *peperasmenos*
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call: *prosagoreuein*
capacity: *dunamis*; be unable: *adunatein*; impotent: *adunatos*; incapacity: *adunamia*
cause: *aitia*; causal: *aitiôdês*; without a cause: *anaitios*
caution: *eulabeia*
centre: *kentron*
challenge: *agônizesthai*

change: *enallagê*, *metabolê*, *metastasis*; change position: *methistasthai*; liable to change: *metaptôtos*; unchanging: *ametaptôtos*, *atreptos*
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choice: *proairesis*
chromatic range: *parakhrôsis*
circumspect: *amphibolos*
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clarification: *saphêneia*
classify: *anagein*, *diatattein*
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complete: *holoklêros*, *sumperainein*, *sumplêroun*, *teleios*; completion: *apoplêrôsis*, *apoteleutêsis*; bringing completion: *sumplêrôtikos*
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comprehend: *katalambanein*, *perilambanein*; comprehensible: *perilêptos*
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configuration: *skhêmatismos*
confirm: *bebaioun*, *pistousthai*, *summarturein*
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deficiency: *elleipsis*, *endeia*
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